# Reference Guide





# **Growing Great Trees, New Ideas, Family, and Community**

When newlyweds Evelyn and J. Frank Schmidt Jr. planted their first crop of trees in the fall of 1946, they began growing a family, too. Under the family's leadership, our nursery has grown from the original 10 acres to more than 3,000 and is recognized around the world as a leading producer and introducer of urban trees. Bare root, container and B&B trees are sold throughout the United States and Canada and are made available internationally through a network of licensed growers.

The family grew to include four children, nine grandchildren, and a growing number of great-grandchildren. Our Diamond Anniversary celebration in 2021 honored 75 years of Growing New Ideas and the passing of the leadership baton to the third generation. Frank Schmidt III and Jan Barkley retired from dayto-day management of the nursery, and their sister Jean Webster stepped back from her longtime service on the family board.

Thoughtful planning ensures the success of our family-owned business and its continuity into future generations. A Board of Directors, comprised of second and third-generation family members and independent advisors, assists management in sustainably pursuing the family's long-term objective of growing outstanding trees and delivering exceptional customer service.

Together with a dedicated family of employees, the Schmidt family continues to uphold Frank and Evelyn's founding vision of growing beautiful trees, growing new ideas, and growing community for generations to come.

Location: 9500 SE 327th Ave | Mailing: P O Box 189 | Boring OR 97009 phone 503-663-4128 | fax 503-663-2121 | toll-free 1-800-825-8202 www.jfschmidt.com



Our headquarters in Boring, Oregon.



Nightfall<sup>®</sup> Snowbell Red Sentinel<sup>™</sup> Maple

**Redpointe®** Maple

Three generations – the family of Frank and Evelyn Schmidt honors their legacy while growing trees for the future.

## **Sales Team**

Knowledgeable, friendly customer service representatives deliver personalized customer care from our Oregon office. They support our nationwide network of field representatives who provide planting and cultural recommendations and customer service tailored to local growing conditions and market demands.

## **Product Line**

Detailed information about our broad product line is found in our annual Price Guide. More than 500 species and cultivars of shade, flowering, ornamental, conifer and fruit trees are offered in a variety of forms: Bare Root, Container, B&B and Root Bags. The current edition and stock availability can be found on our website. www.jfschmidt.com

## **Marketing Materials**

Published without prices, this reference guide is a coveted handbook of modern tree cultivars. Custom picture tags, trunk wraps, point-of-purchase signage, tree data sheets and posters command attention at garden centers and landscape distribution centers.

## **Trees Are The Answer**

Our famous bumper sticker summarizes our unique outreach to specifiers including landscape architects, designers, arborists, urban foresters, horticultural researchers and garden communicators. Our outreach efforts add value to trees. By highlighting their environmental, economic, social and health benefits and the essential role they play in growing livable, sustainable communities, we demonstrate that *Trees Are The Answer*.

# Tree Life eators Created to put great trees on your radar screen

## Step One

Consult the pages of this Reference Guide for detailed descriptions of more than SOO superior tree varieties and cultivars including foliage, flower, fruit, fall color, hardiness and mature size and form.

## Step Two

Before you specify, send us your "want list" of the trees we grow. Include quantity, size desired, and project location. We'll match your needs with nurseries in your region that have purchased those varieties for growing on to specimen size.

## Step Three

We provide the names of nearby growers so you can contact them about current availability. Thanks to the broad network of nurseries we supply, the trees you need are likely to be a blip on our TreeLocator<sup>sm</sup> radar screen.





## **Color Your Walls**

Our colorful posters are great sales tools. Inspire your customers to buy trees by displaying these informative posters in your garden center, nursery office, landscape distribution center, design studio, classroom or botanical garden.

Each of the five posters features 22 of our finest trees – a mix of new and tried-and-true species and cultivars. They're grouped into five categories: Spectacular Shade Trees, Oaks & Elms, Majestic Maples, Crabapples & Dogwoods, and Fantastic Flowering Trees. Perfect for framing, they're designed to fit into standard 24" x 36" poster frames.

Poster sets are distributed free of charge at green industry events and delivered to customers by our sales representatives. Green industry professionals may request a set by calling our office.



Our New Plant Development team, Jim Donohoe and Guy Meacham with Raspberry Spear® Crabapple.

## **New Plant Development and Schmidt Introductions**

Our nursery is on the leading edge of adding new and underused tree species and cultivars to the tree planter's palette. Since the introduction of Red Sunset<sup>®</sup> Maple in 1966, we have introduced or co-introduced more than 115 unique cultivars to the marketplace.

Hybridization and selection efforts by our New Plant Development team include rigorous trials and observation of promising selections for a decade or more before they are considered for introduction. Tree breeders and evaluators across the continent assist us with regional testing to ensure that our new introductions are not just new – **they are better**!

Our New Plant Development team brings new and improved tree cultivars to market via in-house propagation, hybridization and selection efforts. We also partner with those who bring promising trees to us for trial, observation and potential co-introduction. We are always on the lookout for tree species and improved cultivars that will increase the genetic diversity of our urban forests. If you have a promising candidate for introduction, we welcome your call.



# Northwest ShadeTrees

Northwest Shade Trees joined our nursery family in 2022. Founded in 1973 by Schmidt family members and key employees of J. Frank Schmidt & Son Co., the company grew in size and reputation to be the region's standard for comparison among specimen tree nurseries. Recognized throughout the industry as a premier source of top-quality B&B trees, its product line includes a wide range of species and cultivars of deciduous trees and conifers. The 350-acre farm is located in the fertile Willamette Valley near Brooks, Oregon. Learn more at http://www.shadetrees.com

## A new look for an old friend - jfschmidt.com

Since 1995, www.jfschmidt.com has been a trusted, go-to website for tree information. Three decades later, that old friend has a new look and feel. Its ease of use will endear it to a new generation of JFS customers, their customers, specifiers, and tree advocates around the world. Mobile-friendly, it includes a retailer locator so consumers can easily connect with JFS customer nurseries that carry our trees. A searchable plant database is rich with information and photos of the trees we grow. You'll find our current availability, quick links to our regional sales representatives and Oregonbased staff, informative videos, an engaging blog, downloadable catalog, retail signage, tree fact sheets and many other resources.



## www.jfschmidt.com

## Acer - Maple

Tree



# Drawings and Size Ratings

Tree shape and growth habit change as a tree grows. Young trees are often upright, while older ones of the same cultivar may become spreading. "Mature" size of a tree varies by climate, landscape site characteristics and how long the tree lives. City trees rarely reach the size and age of their counterparts in native forest stands.

In a city situation, trees that reach 30 years of age generally grow slowly beyond that time. Therefore, the size ratings and growth habits shown in this publication are our best estimates for a healthy 30 year old tree grown under "average" city conditions.

©J. Frank Schmidt & Son Co. tree form illustrations

Our grading standards follow the system developed by AmericanHort<sup>®</sup> (American Horticulture Industry Association). Caliper measurements are taken at six inches above the soil line.

The American Standard for Nursery Stock, approved by the American National Standards Institute, Inc. (ANSI), is available as a **free** download from the AmericanHort® website, www.AmericanHort.org (614-487-1117)

Thanks to our extensive research and development efforts, and collaboration with a worldwide network of tree breeders, J. Frank Schmidt & Son Co. has introduced or co-introduced more than 115 improved tree cultivars. Each is identified by this icon:

Trees branded as UtiliTrees™ are those best suited for planting in the restricted zone between street and sidewalk and beneath utility lines. Small stature, adaptability, pest resistance, and low maintenance requirements are among the characteristics of trees in our UtiliTrees™ collection, detailed on Page 78. They are identified throughout the reference guide by this icon:

## Acer buergerianum

## Trident Maple

# Acer buergerianum Trident Maple



Zone: 6 Height: 20' Spread: 20' Shape: Round, low and spreading Foliage: Glossy green, pale underside Fall Color: Red, orange

Adaptability to urban environments and small stature make this handsome tree a good choice for confined sites and tough growing conditions including drought and air pollution.

## Acer campestre

## Hedge Maple

## Acer campestre Hedge Maple



Zone: 5 Height: 30' Spread: 30' Shape: Dense and rounded Foliage: Dark green, glossy Fall Color: Yellow

## **INSECT RESISTANCE:** Japanese beetle

A low maintenance, tough tree which adapts well to urban settings. Medium slow in growth rate and long lived. Attractive corky bark is striking in the winter.

## Acer campestre 'Panacek' Metro Gold® Maple



Zone: 5b Height: 35' Spread: 20' Shape: Upright narrow oval Foliage: Dark green Fall Color: Bright yellow

## INSECT RESISTANCE: Japanese beetle

This is an excellent street tree selection from a species that has earned a reputation as a tough urban tree. Upright and narrow in form, it is much more slender than seedling hedge maple and a better fit for narrow city streets. It produces fewer seeds than typical of the species and has an improved, bright yellow fall color.



## Acer campestre 'Evelyn' Queen Elizabeth™ Maple



Zone: 6 Height: 35' Spread: 30' Shape: Upright branching, oval Foliage: Dark green Fall Color: Yellow

## INSECT RESISTANCE: Japanese beetle

More vigorous and upright growing than typical Hedge Maples, this medium sized shade tree has upright branch angles of 45 degrees as opposed to the horizontal or sometimes downward growing branches typical of the species. Rounded at maturity, it is a handsome, symmetrical, and reliable city tree.



# Acer circinatum Vine Maple



Zone: 6 Height: 15' Spread: 10' Shape: Multistemmed, upright spreading Foliage: Green Fall Color: Orange to bright red Fruit: Red winged samaras

Pacific Northwest native tree has a delicate and artistic growth habit, rich green summer foliage and excellent fall color.

4

## Acer circinatum 'Pacific Fire' Pacific Fire Maple



Zone: 6 Height: 12' Spread: 8' Shape: Multistemmed, upright spreading Foliage: Medium green Fall Color: Orange-yellow Fruit: Red winged samaras

Young branches turn brilliant red in autumn just in time to light the winter landscape on fire. The color parade continues into spring as lime green foliage unfolds against scarlet stems that mellow to orange brown as they mature.

## Acer freemanii

## Freeman Maple

## Acer × freemanii 'Jeffersred' Autumn Blaze® Maple



Zone: 3 Height: 50' Spread: 40' Shape: Upright branching, broadly oval Foliage: Medium green

Fall Color: Brilliant orange-red, long lasting

Drought tolerance and exceptionally bright red fall color are hallmarks of this popular and proven performer. A hybrid of Red and Silver Maple, this vigorous grower combines the best attributes of both in a stately, adaptable, fast growing shade tree.

## Acer × freemanii 'DTR 102' Autumn Fantasy® Maple



Zone: 4 Height: 50' Spread: 40' Shape: Broadly oval Foliage: Green Fall Color: Bright red

A fast growing hybrid of Red and Silver maple, it consistently produces very good fall color, even in warmer climates.



## Acer × freemanii 'Celzam' Celebration<sup>®</sup> Maple



Zone: 4 Height: 50' Spread: 35' Shape: Broadly oval Foliage: Green Fall Color: Yellow to orange

Leaves are deeply cut and resemble those of Silver Maple, but the tree has better form. Open branch angles and strong wood resist storm and ice damage. Tolerant of urban soils.

## Acer × freemanii 'AF#1' PP 15593 Firefall™ Maple



Zone: 3b Height: 50' Spread: 35' Shape: Upright oval Foliage: Green Fall Color: Orange-red to red Fruit: Seedless

Deeply cut foliage, exceptional cold hardiness, and bright red fall color are among the special attributes of this tree. A controlled cross of Beebe cutleaf silver maple and Autumn Spire red maple, this University of Minnesota release is a fast growing, bright performer for the North.

## Acer × freemanii 'Marmo' Marmo Maple



Zone: 3 Height: 55' Spread: 45' Shape: Upright, oval Foliage: Medium green Fall Color: Orange to orange-red

A seedless hybrid of Red and Silver Maple, its growth rate and form are similar to that of Silver Maple, while its fall color is that of Red Maple. Resistance to frost cracking is also a plus.

## Acer × freemanii 'Bailston' Matador™ Maple – First Editions®



Zone: 4 Height: 45' Spread: 35' Shape: Upright, oval Foliage: Green Fall Color: Bright red

A tough, hardy maple with upright, symmetrical form and adaptability to varied soils. Deep red, long lasting fall color is consistently bright and appears later in the season than is typical of *A. freemanii* cultivars.



Acer - Maple



## Acer × freemanii 'Sienna' Sienna Glen® Maple



Zone: 3 Height: 50' Spread: 35' Shape: Pyramidal Foliage: Green Fall Color: Rusty orange to burgundy Fruit: Reported seedless

This hardy hybrid maple was discovered in Minnesota. It features a strong central leader and develops a pyramidal form with minimal pruning. This is a tough, low maintenance tree. **Acer -** Maple



6

Acer grandidentatum 'JFS-NuMex 3' PP 27930



Glossy dark green leaves withstand the heat, drought and drying winds of Rocky Mountain summers before glowing bright orange to orange-red in autumn.

## Acer ginnala

## Amur Maple

# Acer ginnala 'Flame' Flame Maple



Zone: 2 Height: 20' Spread: 20' Shape: Low branched or multi-stemmed tree, rounded Foliage: Medium green, fine texture Fall Color: Brilliant orange-red to deep red

One of the hardiest trees available. Specimens are very interesting in form because of their spreading branch pattern. Flame is a seed source selection, chosen for improved form and consistent fall color.

## Acer ginnala 'Ruby Slippers' Ruby Slippers Maple



Zone: 3 Height: 20' Spread: 20' Shape: Low branched, upright spreading to rounded Foliage: Medium green, fine textured Fall Color: Bright red Fruit: Bright red samaras

Selected for a straight trunk, dense canopy, and bright red samaras in early summer, this cultivar brings uniformity to a variable species. It shows good nursery form and bright fall color.

# Acer glabrum

**Rocky Mountain Maple** 

## Acer glabrum Rocky Mountain Maple



Zone: 5 Height: 25' Spread: 15' Shape: Oval Foliage: Medium green Fall Color: Yelloworange to red

This wide ranging Western tree is native from SE Alaska through the Rocky Mountains. Deeply lobed, serrated leaves are borne on purplish red stems, accented in late summer by red-tinted samaras. Fall colors are bright, and red twigs enliven the winter landscape.

## Acer grandidentatum

**Bigtooth Maple** 

## Acer grandidentatum Bigtooth Maple



Zone: 4 Height: 20' Spread: 20' Shape: Rounded Foliage: Medium green Fall Color: Orange-red to red

Native to the Rocky Mountains, this smaller cousin of the eastern sugar maple tolerates the quick changing weather of the western mountains. In its native habitat, it lights up the canyons with bright red fall color.

## Acer grandidentatum 'JFS KW13AGRA' High Peaks<sup>™</sup> Maple



Zone: 4 Height: 25' Spread: 18' Shape: Upright oval Foliage: Dark green Fall Color: Orange-red to red

This upright, relatively narrow selection of Bigtooth Maple was selected as the best performer among saplings grown from seed collected in the Manzano Mountains of New Mexico. Dense branching and tighter growth habit make it a better choice for urban landscapes than typical Bigtooth maples. Dark green summer foliage turns bright orange-red to red in autumn.



## Acer grandidentatum × saccharum 'Hipzam' Highland Park<sup>®</sup> Maple



Zone: 4 Height: 35' Spread: 22' Shape: Pyramidal Foliage: Dark green Fall Color: Red

Intermediate in size, this tree appears to be a hybrid between *A. grandidentatum* and *A. saccharum*. Tightly upright and pyramidal, its thick leaves are tatter resistant and turn bright red in autumn. Faster growing and more upright than typical bigtooth maple yet smaller and more heat resistant than sugar maple.

## Acer grandidentatum 'JFS-NuMex 3' PP 27930 Mesa Glow<sup>®</sup> Maple



Zone: 4 Height: 28' Spread: 18' Shape: Upright oval Foliage: Dark green Fall Color: Orange red to red

Drought tolerance, cold hardiness and adaptability make this upright selection of the native bigtooth maple a top choice for the intermountain West. Glossy leaves and bold fall color distinguish this selection made by Rolston St. Hilaire of New Mexico State University.

## Acer grandidentatum 'Schmidt' Rocky Mountain Glow<sup>®</sup> Maple



Zone: 4 Height: 25' Spread: 15' Shape: Oval Foliage: Dark green Fall Color: Yellow to orange-red

This slow growing relative of the Sugar Maple is native to the Rocky Mountains. It is similar to Sugar Maple, but both leaves and tree are smaller. Intense fall color.



## Acer griseum

# Paperbark Maple

## Acer griseum Paperbark Maple



Zone: 5 Height: 25' Spread: 20' Shape: Upright spreading, rounded crown Foliage: Trifoliate, dark green Fall Color: Red

A small tree of rare beauty, this trifoliate maple's compound leaves give it a delicate texture in summer, then display long lasting red fall color. Exfoliating orange-brown to cinnamon-brown bark creates year round interest.

Acer griseum × A. maximowiczianum 'Molly Fordham'

## Cinnamon Girl™ Maple



Zone: 5 Height: 25' Spread: 20' Shape: Upright oval Foliage: Dark green, trifoliate Fall Color: Rich dark red

This vigorous and heat tolerant hybrid develops a wonderful cinnamon colored bark that flakes with age. Trifoliate leaves maintain their rich, dark green color through the heat of summer and turn to deep crimson and red in autumn.

Acer griseum 'JFS KW22AGRI' Copper Rocket<sup>®</sup> Paperbark Maple



Cinnamon Girl<sup>™</sup> Maple

Zone: 5 Height: 25' Spread: 12' Shape: Narrow columnar Foliage: Dark green, trifoliate Fall Color: Brilliant red Bark: Coppery brown, smooth with exfoliating papery curls

Upright branches and narrow form deliver a rocket-like shape that's tailored for narrow spaces where seedling-sourced *Acer griseum* of variable genetics may not mature to be a good fit. This all-season beauty delivers vibrant foliage plus winter interest when satin smooth bark exfoliates in coppery curls.



Acer - Maple



Copper Rocket® Paperbark Maple Rocky Mountain Glow® Maple







Tranquil Sunrise™ Maple

State Street® Maple Ed Wood Fullmoon Maple

## Acer griseum 'JFS KW8AGRI' Fireburst<sup>®</sup> Paperbark Maple



## Zone: 5 Height: 25' Spread: 18' Shape: Upright oval Foliage: Dark green, trifoliate Fall Color: Brilliant red

Fall Color: Brilliant red Bark: Reddish-brown, smooth with exfoliating papery curls

Superior branch structure, upright and uniform shape, predictable performance and speedy growth are among attributes of this Paperbark Maple cultivar. Bark coloration and exfoliating character are outstanding, as is the quality of dark green foliage that turns brilliant red in autumn.

## Acer macrophyllum

**Bigleaf Maple** 

## Acer macrophyllum Bigleaf Maple



Zone: 6 Height: 60' Spread: 50' Shape: Broadly oval to rounded Foliage: Dark green Fall Color: Yellow

An extremely vigorous west coast native, with leaves that can measure a foot across. Forms a broad canopy quickly, it is especially valuable for planting natural areas in its native range.

## Acer henryi Henry Maple

## <sup>Acer henryi 'JFS KW8AH'</sup> **Tranquil Sunrise™ Maple**



Zone: 6 Height: 30' Spread: 25' Shape: Oval with upright branching Foliage: Dark green, dark red to crimson new growth Fall Color: Purple deepening to red-orange

A smaller and more refined relative of Box Elder Maple, this native of China is a handsome garden tree. Upright branch habit and narrow form of our selection make it a fine choice for street tree and urban use. A striking, two-tone effect occurs as claret red new growth flushes above mature, dark green trifoliate leaves. Rich purple fall color deepens to red-orange.

# Acer miyabei

## Miyabe Maple

## Acer miyabei 'JFS-KW3AMI' Rugged Ridge<sup>®</sup> Maple



Zone: 4 Height: 55' Spread: 40' Shape: Upright oval Foliage: Dark green Fall Color: Yellow Bark: Corky, deeply furrowed

Rugged, corky bark inspired the name of this impressive cultivar of Miyabe Maple and provides protection from sunscald and winter damage. More vigorous, with heavier caliper and more ornamental bark than others of the species, this tough and adaptable tree is a favorite of growers and a versatile large street tree for cities.

# Acer japonicum

## Fullmoon Maple

## Acer japonicum 'Ed Wood #2' Ed Wood Fullmoon Maple Zone: 5



Height: 20' Spread: 25' Shape: Broadly upright spreading Foliage: Green, large, deeply cut Fall Color: Orange, yellow, and red

Excellent fall color, vigorous growth, and leaves much larger than those of the species are merits of this outstanding seedling of 'Aconitifolium.' Selected by plantsman Ed Wood, its large, fanlike, cutleaf foliage and curving branches give a tropical feel to landscape plantings. Acer miyabei 'Morton'
State Street® Maple



Zone: 4 Height: 50' Spread: 35' Shape: Upright oval Foliage: Dark green Fall Color: Yellow

Think of this Morton Arboretum release as a turbocharged, more hardy alternative to *A. campestre*. Rough corky bark and leaf shape are similar to Hedge Maple, but its stronger growth rate and ascending branch habit result in a larger mature size. Excellent drought and cold tolerance and clean, pest-free foliage.

## Acer - Maple

# 9

## Acer negundo

## Box Elder Maple

# Acer negundo 'Sensation' Sensation Box Elder



Zone: 4b Height: 30' Spread: 25' Shape: Rounded Foliage: Medium green Fall Color: Brilliant red Fruit: Seedless

Sensation is a male box elder clone that features slower, more controlled growth, improved branch structure, and an outstanding display of brilliant red autumn foliage. Warren Carnefix of Fruitland Nursery discovered the original tree growing

## Acer nigrum

## Black Maple

near an abandoned Idaho homestead.

## Acer nigrum 'Greencolumn' Greencolumn Maple



Zone: 4 Height: 50' Spread: 20' Shape: Upright, narrow Foliage: Light green Fall Color: Yellow to apricot orange, excellent

An upright oval tree with good resistance to heat, this is a selection of Black Maple. Better adapted to hot dry conditions than Sugar Maples. Leaves are yellow-orange, instead of red, in the fall. The original tree was selected by Bill Heard from a native stand in central lowa.

## Acer palmatum

## Japanese Maple

## Acer palmatum Japanese Maple



Zone: 5 Height: 20' Spread: 24' Shape: Upright, then broadly spreading Foliage: Green Fall Color: Yelloworange to orange-red

The green leafed, seedling grown Japanese Maple has fine textured foliage and a light airy appearance. It is generally faster growing and adapts to more difficult environments than the hundreds of cultivars which derive from it.

## Acer palmatum 'Bloodgood' Bloodgood Japanese Maple



Zone: 5 Height: 18' Spread: 18' Shape: Upright, becoming broad topped with age Foliage: Purple-red Fall Color: Red

Widely used, well known, and reliable. Grown both as single-trunked and multi-stem trees, Bloodgood is the standard for comparison among the purple leafed, upright growing Japanese Maples.

## Acer palmatum 'Emperor I' Emperor I Japanese Maple



Zone: 5 Height: 18' Spread: 16' Shape: Upright, rounded, narrow Foliage: Dark red Fall Color: Scarlet red

Narrower in form and reputed to be more heat tolerant than Bloodgood, its foliage maintains its rich color through the heat of summer before turning bright scarlet red in autumn. Late to leaf out in spring, it's a good choice where late frosts may damage tender spring foliage.

## Acer palmatum 'Shishigashira' Shishigashira Japanese Maple



Zone: 6 Height: 15' Spread: 10' Shape: Upright vase Foliage: Deep green, crinkled Fall Color: Golden to orange-red

Commonly known as Lion's Head Maple, this slow growing cultivar has unique, crinkly leaves. Interesting foliage coupled with compact growth make this an ideal small tree for patio or lawn.

# Acer palmatum 'Twombley's Red Sentinel' **Twombley's Red Sentinel Japanese Maple**



Height: 18' Spread: 9' Shape: Upright, narrow Foliage: Burgundy red Fall Color: Scarlet red

**Zone:** 5

Columnar form of this vigorous and unusual sport of Bloodgood makes it a fine choice for containers, courtyards and small spaces. Spring foliage emerges bright red and darkens to burgundy in summer. Attractive bark and twigs are dark red and add winter interest.





Shishigashira Japanese Maple

Emperor I Japanese Maple



## www.jfschmidt.com

## **Acer -** Maple



**Red Dragon Japanese Maple** 



# Acer palmatum dissectum

## Acer palmatum dissectum 'Crimson Queen' Crimson Queen Japanese Maple



Zone: 5 Height: 6' Spread: 8' Shape: Weeping, mounded Foliage: Laceleaf, deep purple-red Fall Color: Scarlet

Among the red laceleaf cultivars, the foliage of Crimson Queen is particularly heat resistant. Delicate leaves maintain their deep purple-red color through the summer months and turn scarlet in the fall.

## Acer palmatum dissectum 'Orangeola' Orangeola Japanese Maple



Zone: 5 Height: 8' Spread: 12' Shape: Weeping Foliage: Laceleaf, deeply dissected Fall Color: Bright orange red

Foliage emerges bright orange red and matures to rich reddish green. A summer flush of new growth presents a unique, two-tone overlay of orange red atop the mature foliage, all of which darkens to red in autumn and then erupts with fiery orange red tones. Observed to perform better in hotter, sunnier locations than other redfoliaged *A. p. dissectum* cultivars.

# Acer palmatum dissectum 'Red Dragon' Red Dragon Japanese Maple



Zone: 5 Height: 6' Spread: 8' Shape: Weeping, compact Foliage: Laceleaf, burgundy red Fall Color: Scarlet red

Delicate, deeply dissected leaves emerge scarlet in spring and mature to a rich burgundy shade. Even in late summer, its heat-resistant foliage is darker and more purplish red than that of Crimson Queen. An eruption of scarlet red foliage flows along its gracefully cascading branches in autumn. Vigorous and compact, it's a perfect fit for small garden spaces and container culture.

## Acer palmatum dissectum 'Tamukeyama' Tamukeyama Japanese Maple



Zone: 5 Height: 8' Spread: 12' Shape: Weeping Foliage: Laceleaf, deep purple-red Fall Color: Red

Tamukeyama is outstanding among the laceleaf weepers for its rich foliage color. Leaves hold their deep purple color through the heat of summer better than other cultivars.



## Acer palmatum dissectum 'Viridis' Weeping Green Japanese Maple



Zone: 5 Height: 6' Spread: 8' Shape: Weeping, mounded Foliage: Laceleaf, bright green Fall Color: Golden orange

This green laceleaf weeper maintains a fresh, bright green appearance all summer. Finely cut leaves turn a brilliant golden orange in the fall.

## Acer platanoides

## Norway Maple

Acer platanoides 'Columnare' Columnar Norway Maple



Zone: 4 Height: 35' Spread: 15' Shape: Narrow, upright, with ascending branches Foliage: Dark green Fall Color: Yellow

True to its name, this cultivar produces a column of green foliage. It is ideal for street use where buildings demand a narrow tree. It develops stout branches which grow stiffly upward, almost parallel to the main stem, which gives it a bold appearance in winter.



Zone: 4 Height: 40' Spread: 35' Shape: Oval when young, becoming rounded Foliage: Deep purple Fall Color: Maroon to reddish-bronze

The most commonly used cultivar of the purpleleafed Norway Maples, Crimson King retains its purple foliage color well from spring until fall.

## Acer platanoides 'Crimson Sentry' Crimson Sentry Maple



Zone: 4b Height: 25' Spread: 15' Shape: Compact and dense, pyramidal to oval

Foliage: Deep purple Fall Color: Maroon to reddish-bronze

This bud sport of Crimson King shares the deep purple leaf color of its parent, but matures to a much smaller ultimate size. A very compact, heavily branched, upright tree.

## Acer platanoides 'Deborah' Deborah Maple



Zone: 3b Height: 45' Spread: 40' Shape: Broadly oval to rounded Foliage: Reddishpurple in the spring, becoming dark bronze-green in the summer Fall Color: Bronze

Deborah is a beautiful tree in spring and early summer when new leaves unfold, red tinted then purplish as they expand. In summer the tree becomes dark bronze-green.

## Acer platanoides 'Pond' Emerald Lustre<sup>®</sup> Maple



Zone: 3 Height: 45' Spread: 40' Shape: Upright spreading, rounded Foliage: Medium green Fall Color: Yellow

A vigorous selection which forms a rounded canopy, this tree was selected for its tendency to branch out heavily as a young tree in the nursery.

## Acer platanoides 'Emerald Queen' Emerald Queen™ Maple



Zone: 4 Height: 50' Spread: 40' Shape: Dense oval, with upright spreading branches Foliage: Deep green, reddish tint in spring Fall Color: Yellow

Emerald Queen<sup>™</sup> is probably the most widely used Norway Maple cultivar. In many respects it is the best green leafed selection. It forms a well shaped oval tree with good environmental tolerance and reliable yellow fall color.

## Acer platanoides 'Princeton Gold' Princeton Gold® Maple



Zone: 4 Height: 35' Spread: 30' Shape: Oval Foliage: Bright yellow Fall Color: Yellow

Princeton Gold<sup>®</sup> is characterized by yellow foliage, particularly bright on new growth. The overall coloration is similar to Sunburst<sup>®</sup> Honeylocust.

## Acer platanoides 'Royal Red' Royal Red Maple



Zone: 4 Height: 40' Spread: 30' Shape: Oval when young, becoming rounded Foliage: Deep purple Fall Color: Maroon to reddish-bronze

This purple leafed selection is very similar to Crimson King, but is considered by some people to have better cold hardiness.

## Acer platanoides 'Drummondii' Silver Variegated Maple



Zone: 4 Height: 35' Spread: 25' Shape: Broadly oval Foliage: Variegated, light green with creamy white margin Fall Color: Yellow

Admired for its unusual variegated foliage, it has a striking, brilliant effect in a landscape. Individual branches may occasionally revert to green and must be pruned out.



## Princeton Gold® Maple

**Silver Variegated Maple** 







12



A slender column of deep green summer foliage transforms to candle-bright leaves in autumn. A perfect shade tree for space-challenged gardens and street-side plantings!

## Acer pseudosieboldianum

## Korean Maple

## Acer pseudosieboldianum Korean Maple



Zone: 4 Height: 22' Spread: 18' Shape: Upright to upright spreading Foliage: Green Fall Color: Yelloworange to bright red

Very cold hardy yet delicate in appearance, this close relative of Japanese maple brings an oriental elegance to the northern garden. A little more upright than Japanese maple, it displays small reddish-purple flowers in spring and brightly colored foliage in autumn.

## Acer pseudosieboldianum × palm. 'Hasselkus' Northern Glow<sup>®</sup> Maple



Height: 20' Spread: 24' Shape: Upright, then broadly spreading Foliage: Green Fall Color: Bright orange-red to deep red

**Zone:** 4

Enjoy the refined character of Japanese maple beyond its traditional hardiness range with this hybrid selection. Developed in Madison, Wisconsin, by Dr. Ed Hasselkus, it originated from seed of the tough and cold-hardy Korean maple, but most resembles its *A. palmatum* parent. Attractive in summer green, its graceful, spreading form glows bright with fall colors.



**Red Maple** 

## Acer rubrum **Red Maple**



Zone: 4 Height: 40' Spread: 40' Shape: Broadly oval to round Foliage: Green Fall Color: Yellow orange to bright red

Native to eastern U.S., this tree is well adapted to city conditions and wet soils. This is the parent species of numerous cultivars.

## Acer rubrum 'Armstrong' Armstrong Maple



Zone: 4 Height: 45' Spread: 15' Shape: Narrow, fastigiate Foliage: Light green Fall Color: Yellow to orange-red

Armstrong is a fast growing columnar selection. It produces a very tall, narrow tree with ascending branches. It is widely used for street planting where space demands a tree which will not spread.

Armstrong Cold<sup>®</sup> Maple - Low Branched



## Acer rubrum 'JFS-KW78' PP 25301 Armstrong Gold® Maple



Zone: 4 Height: 40' Spread: 12' Shape: Narrow, tightly fastigiate Foliage: Medium green Fall Color: Golden to orange

Selected from an evaluation of hundreds of seedlings of 'Armstrong', this cultivar improves greatly on the parent, with brighter foliage color, greater foliage density and compact, less leggy growth habit. Improved columnar form recommends it for narrow street planting sites.

## Acer rubrum 'Bowhall' Bowhall Maple



Zone: 4 Height: 40' Spread: 15' Shape: Upright, very narrow Foliage: Medium green Fall Color: Yelloworange to reddishorange

Bowhall is a tightly formed, sturdy, narrow tree excellent for street plantings. It stays smaller than Armstrong and has better foliage color in both summer and fall.

## Acer rubrum 'Brandywine' **Brandywine Maple**



Height: 40' Spread: 30' Shape: Oval Foliage: Dark green Fall Color: Deep red Fruit: Seedless

**Zone:** 4

Introduced by the National Arboretum, Brandywine is a cross of October Glory<sup>®</sup> and Autumn Flame. Seedless, it produces deep red fall color ten days later than most red maples and has proven to be well adapted in the South.

## Acer rubrum 'Magnificent Magenta' **Burgundy Belle® Maple**



Height: 45' Spread: 40 Shape: Oval to rounded Foliage: Dark green Fall Color: Deep burgundy

Zone: 5

Spring foliage emerges with a red flush before maturing to dark green. Leaves turn bright red in autumn and deepen to burgundy in a long-lasting show of fall color. Of Kansas origin, this symmetrical shade tree demonstrates good tolerance of heat, drought and cold.



## Acer rubrum 'October Glory' **October Glory**<sup>®</sup> Maple



Zone: 5 Height: 40' Spread: 35' Shape: Broadly oval to round Foliage: Medium green, glossy Fall Color: Deep red to reddish-purple

## October Glory® is a round headed selection which is the last cultivar to color in the fall. While it is less cold hardy than most cultivars, it seems to be better adapted to areas with mild winters and hot summer temperatures.

## Acer rubrum 'Red Rocket' **Red Rocket Maple**



**Zone:** 3 Height: 38' Spread: 15' Shape: Upright, narrow Foliage: Green Fall Color: Orange red to red Fruit: Seedless

Narrow and upright, this red maple appears to be as tight as Bowhall, but a little slower growing. From a Minnesota seed source, it is one of the most cold hardy cultivars. Fall color is very bright, orange red to red.

## Acer rubrum 'WW Warren' **Red Sentinel<sup>™</sup> Maple**



**Zone:** 5 Height: 40' Spread: 18' Shape: Narrow, tightly fastigiate Foliage: Medium green Fall Color: Bright red

True to its name, Red Sentinel<sup>™</sup> presents the best and brightest combination of columnar form and fiery red fall color imaginable. A dominant central leader and dense branching form a narrow column of medium green, anthracnose resistant leaves that cast cool shade. Perfectly suited for street tree plantings, parks and tight urban spaces.

## Acer rubrum 'Franksred' **Red Sunset® Maple**



Height: 45' Spread: 35' Shape: Upright branching, oval Foliage: Dark green, glossy Fall Color: Brilliant orange-red to red

Highly rated and reliable, Red Sunset® has become the standard to which others are compared. Developed by J. Frank Schmidt, Jr., it is vigorous with a strong and symmetrical branching pattern. Lustrous, glossy green summer foliage changes to brilliant shades of red and orange-red in the fall.







Acer - Maple



**Red Sunset® Maple** 

**Acer** - Maple



14

Rich, deep green leaves turn brilliant red in autumn. Fast growth, heat tolerance and insect resistance make it an easy-care, energy saving shade tree for earth friendly landscapes.

## Acer rubrum 'Frank Jr.' PP 16769 Redpointe<sup>®</sup> Maple



Zone: 5 Height: 45' Spread: 30' Shape: Broadly pyramidal Foliage: Dark green Fall Color: Bright red

Brilliant red fall color plus upright, broadly pyramidal form make this Schmidt introduction a standout. The refined form and foliage of the best Acer rubrum cultivars combine with the faster growth rate normally found in Acer × freemanii. A straight and dominant central leader results in strong branch angles that make it easier to grow.



## Redpointe<sup>®</sup> Maple delivers green

A Redpointe<sup>®</sup> Maple leaf and the leaf of a popular red maple cultivar demonstrate its superior resistance to leaf chlorosis. Typical of *Acer rubrum* when grown on high pH soils, this yellowing of summer foliage is caused by manganese deficiency, a condition often found in high pH soils. Leaves were plucked from trees growing in adjacent rows of a Midwest customer's nursery. Heat tolerance is also excellent: It seems the hotter the summer days, the darker green the foliage becomes.

# Acer rubrum 'Sun Valley' Sun Valley Maple



Zone: 5b Height: 40' Spread: 35' Shape: Oval, symmetrical, densely branched Foliage: Dark green Fall Color: Bright red Fruit: Seedless

This U. S. National Arboretum introduction glows in the fall with reliable bright red color. A hybrid between Red Sunset<sup>®</sup> and Autumn Flame, it is seedless and features a very uniform, dense oval head.

## Acer saccharinum

Silver Maple

## Acer saccharinum 'Silver Queen' Silver Queen Maple



Zone: 3 Height: 50' Spread: 40' Shape: Oval with upright spreading branches Foliage: Medium green above, silvery beneath Fall Color: Yellow Fruit: Seedless

A dominant central leader and better crotch angles promise improved storm resistance over Silver Maples grown from seed. Slender branches and upright, spreading form add refinement to this heat and cold tolerant, tough and durable shade tree.

## Acer saccharinum 'JFS H1' Symatree<sup>®</sup> Maple



Zone: 3 Height: 30' Spread: 20' Shape: Upright oval Foliage: Light green, silvery beneath Fall Color: Bright yellow to burgundy red Fruit: None observed

A standout seedling, grown from seed collected from a witch's broom, was selected by Dr. William Hoch in Wisconsin for its uniquely compact growth habit and excellent branch structure that forms a remarkably symmetrical, upright oval tree. During more than 20 years of close observation, neither flowers or seeds have appeared on the parent tree.



## Acer saccharum

Sugar Maple

## Acer saccharum Sugar Maple



Zone: 4 Height: 45' Spread: 40' Shape: Upright oval to rounded Foliage: Medium green Fall Color: Orange, red and scarlet

One of the finest trees for fall color. Somewhat slow growing but long lived, it acquires a stateliness all its own.



## Acer saccharum 'Barrett Cole' Apollo<sup>®</sup> Maple



Height: 30' Spread: 10' Shape: Narrow, columnar Foliage: Dark green Fall Color: Yelloworange to red

Zone: 4

## **INSECT RESISTANCE:** Japanese beetle

Unique narrowness, dense branching and symmetrical compact form make this dwarf and columnar Sugar Maple ideal for limited spaces. Dark green foliage withstands summer heat.

## Acer saccharum 'JFS-KW8' PP 22034 Autumn Fest<sup>®</sup> Maple



Zone: 4 Height: 50' Spread: 35' Shape: Upright oval Foliage: Dark green Fall Color: Orange red to red

Strong upright growth and reliable, early fall color make this a standout in the nursery and on the streets. Vigorous, with a good central leader, it is faster growing with a more upright shape than typical of sugar maples.

# Acer saccharum 'Autumn Splendor' Autumn Splendor Maple



Zone: 5 Height: 45' Spread: 40' Shape: Broadly oval to rounded Foliage: Glossy green Fall Color: Bright orange-red

One of the best and brighest sugar maples for the southern plains and the Southwest. Selected from an isolated strain of sugar maple found in Caddo County, Oklahoma, by the late Dr. John Pair of Kansas State University. It is very resistant to heat, drought and leaf tatter.

# Acer saccharum 'Commemoration' Commemoration® Maple



Zone: 4 Height: 50' Spread: 35' Shape: Oval to rounded Foliage: Thick, dark green, glossy Fall Color: Orange to orange-red

This rapid growing Sugar Maple has thick, heavy leaves that are resistant to leaf tatter. It branches well as a young tree and develops good caliper.

## Acer saccharum 'Morton' Crescendo<sup>™</sup> Maple



Zone: 4 Height: 45' Spread: 40' Shape: Broadly oval Foliage: Dark green Fall Color: Orange red to bright red

Coming from the western range of the Sugar Maple and selected at Morton Arboretum, this tree features tough, heat resistant foliage and good orange red fall color.

## Acer saccharum 'Bailsta' Fall Fiesta<sup>®</sup> Maple



Zone: 4 Height: 50' Spread: 40' Shape: Broadly ovate Foliage: Dark green Fall Color: Orange, red, and yellow

## INSECT RESISTANCE: Japanese beetle

Sturdy and compact when young, this cultivar matures to become a full size specimen with an especially symmetrical crown and thick dark green summer foliage. Autumn brings on a mix of orange, red, and yellow colors.



Acer saccharum 'JFS-KW8' PP 22034



Brighten your view with lush, deep green leaves that turn brilliant red in autumn. Its fast growth and improved heat and drought tolerance will cool your world.





Acer saccharum 'JFS-Caddo2' PP 23361



Dark green, heat resistant leaves cast cool summer shade before turning the brightest red color of any sugar maple adapted to Southern growing conditions.

Vigorous growth, open branch angles, a strong central leader and improved mildew resistance recommend it as the best of the cultivars originating from seed collected in the Caddo Mountains of western Oklahoma.

## Acer saccharum 'JFS-Caddo2' PP 23361 Flashfire<sup>®</sup> Maple



Zone: 4 Height: 45' Spread: 40' Shape: Broadly oval Foliage: Dark green Fall Color: Bright red

Selected from Caddo Mountain sugar maple seedlings, this tree has the brightest red fall color we have seen in a cultivar adapted to Southern heat. It features dark green summer foliage, better mildew resistance than other Caddo selections, strong growth, and brilliant red, early fall color.

## Acer saccharum 'Green Mountain' Green Mountain<sup>®</sup> Maple



Zone: 3 Height: 50' Spread: 40' Shape: Broadly oval Foliage: Dark green Fall Color: Reddishorange to red

## INSECT RESISTANCE: Japanese beetle

Green Mountain<sup>®</sup> is the standard for comparison in Sugar Maples. It is the most widely planted selection and has proven itself well over time. It is probably the hardiest Sugar Maple and is the best choice for northern areas. It provides reliable fall color.

## Acer saccharum 'John Pair' John Pair Maple



Zone: 5 Height: 30' Spread: 30' Shape: Rounded Foliage: Glossy green Fall Color: Red

Symmetrical and rounded in form, this tough and versatile sugar maple of small stature delivers rich green summer foliage and bright fall color to the southern plains and beyond. Selected as an outstanding performer from a Caddo County, Oklahoma seed source by Dr. John Pair of Kansas State University, it thrives in areas where heat, cold, drought and drying winds are the norm.



## Acer saccharum 'Legacy' Legacy<sup>®</sup> Maple



Zone: 5 Height: 50' Spread: 35' Shape: Oval Foliage: Glossy dark green Fall Color: Reddishorange to red

## INSECT RESISTANCE: Japanese beetle

Legacy produces a very symmetrical oval crown. This, combined with its glossy dark green leaves makes it one of the most handsome Sugar Maples in summer. Its leaves are quite tough and resist leaf tatter and drought.

## Acer saccharum 'Hiawatha 1' Oregon Trail<sup>®</sup> Maple



Zone: 5 Height: 45' Spread: 40' Shape: Broadly oval to rounded Foliage: Dark green Fall Color: Orange red to red

A tree with a story, this cultivar was chosen from hundreds of brightly colored sugar maples planted in Hiawatha, KS, "The City of Beautiful Maples." It's a tough Kansas native growing along the Oregon Trail, with strong branch structure, prairie resistant foliage, and great fall color.

16

## Acer saccharum 'Whit XLIX' PP 23957 Powder Keg<sup>®</sup> Maple



**Zone:** 5 Height: 50' Spread: 40' Shape: Upright oval becoming rounded Foliage: Dark green, leathery Fall Color: Bright orange-red

An explosion of bright fall colors and upright, symmetrical form distinguish this resilient cultivar selected from Caddo sugar maples of western Oklahoma. Adaptability to heat, drought, and tough growing conditions extend far beyond its region of origin.



## Acer saccharum 'Sugar Cone' **Sugar Cone Maple**



**Zone:** 4 Height: 25' Spread: 13' Shape: Compact dwarf pyramid Foliage: Dark green Fall Color: Orange-red

Dense, compact, and pyramidal, this descriptively named tree is the most dwarf of the sugar maple we offer. It stays small and tight and will not outgrow its planting location.

## Acer shirasawanum

## Full Moon Maple

## Acer shirasawanum 'Munn 001' PP16718 Moonrise® Full Moon Maple **Zone:** 5



Height: 18' Spread: 10' Shape: Upright oval Foliage: Orange maturing to lime green Fall Color: Medley of red, orange, gold, green

Emerging leaves of bright red, orange and salmon overlay the lime yellow to green tones of older leaves throughout spring and well into summer. Lime green if grown in shade and golden yellow in full sun, foliage has good sun tolerance even in hotter climates where many Japanese maples struggle.

## Acer tataricum

## Tatarian Maple

## Acer tataricum **Tatarian Maple**



**Zone:** 3 Height: 25' Spread: 20' Shape: Oval to rounded, often low branched Foliage: Medium green Fall Color: Yellow to orange-red Fruit: Attractive red samaras

Bright red samaras add summer color. Fine small tree for tough sites, adaptable to dry, high pH soils and cold winters. Very similar to A. ginnala, but leaves are slightly larger and more rounded.

## Acer tataricum 'GarAnn' PP 15023 Hot Wings® Maple



**Zone:** 3 Height: 20' Spread: 24' Shape: Rounded, spreading Foliage: Medium green Fall Color: Yellow to red Flower: White, clusters in May Fruit: Bright red samaras

Showy red samaras (winged seeds) shine in bright contrast to the summer foliage of this small tree that is an excellent performer in rugged climates. Broadly oval when young, its branches spread wider than tall, becoming rounded at maturity.



## Hot Wings® Maple



Green Mountain<u>& M</u>aple



Acer - Maple



Acer truncatum x A. plat. 'JFS-KW202' PP 21838



## Acer tataricum 'JFS-KW2' Rugged Charm® Maple Zone: 3



Height: 28' Spread: 15' Shape: Compact upright oval Foliage: Medium green Fall Color: Yelloworange to red Flowers: White clusters in May Fruit: Attractive red

compact and oval in form, the shapely canopy of this refined selection is a charming improvement

over the hardy and rugged species! Bright red seed wings float in bright contrast against summer's green leaves. Come autumn, the boldly textured foliage shows off a rich mix of yellow, orange, and bright red.

## Acer truncatum Truncatum Maple

## Acer truncatum × A. plat. 'JFS-KW202' PP 21838 Crimson Sunset® Maple



Zone: 4 Height: 35' Spread: 25' Shape: Upright oval Foliage: Deep purple Fall Color: Maroon to reddish bronze

Heat tolerance is the distinguishing characteristic of this *Acer truncatum* hybrid. Its foliage resembles that of Crimson King, but its form is more upright and compact. Thanks to the *Acer truncatum* parentage, it flourishes in the summer heat where few purple leafed plants will thrive.

## Acer truncatum × A. plat. 'Keithsform' Norwegian Sunset<sup>®</sup> Maple



Zone: 4b Height: 35' Spread: 25' Shape: Oval Foliage: Dark green, glossy Fall Color: Yelloworange to red

## INSECT RESISTANCE: Japanese beetle

An upright oval tree with yellow-orange to red fall color. Norwegian Sunset<sup>®</sup> has a particularly nice branch structure and uniform canopy. Its *Acer truncatum* parentage gives glossy foliage and heat resistance.

## Acer truncatum × A. plat. 'Warrenred' Pacific Sunset<sup>®</sup> Maple



Zone: 4b Height: 30' Spread: 25' Shape: Upright spreading, rounded crown Foliage: Dark green, smooth, very glossy Fall Color: Yelloworange to bright red

**INSECT RESISTANCE:** Japanese beetle

Outstanding glossy summer foliage changes to tints of yellow, red, and orange in the fall. Pacific Sunset<sup>®</sup> colors earlier and a little brighter than Norwegian Sunset.<sup>®</sup> Branch structure is a little finer textured and more spreading than Norwegian Sunset.<sup>®</sup>

Acer truncatum × A. plat. 'JFS-KW249' PP 27985 Ruby Sunset<sup>®</sup> Maple



Zone: 4b Height: 25' Spread: 20' Shape: Broadly oval to rounded Foliage: Dark green, glossy Fall Color: Deep red

Elegant foliage stays fresh and glossy throughout the growing season. Hybrid origin adds cold hardiness and adaptability to this selection that most resembles *A. truncatum* in appearance, growth habit and size. A great choice for smaller sites requiring a more compact tree.

## Pacific Sunset® Maple



Acer truncatum × A. plat. 'JFS-KW187' PP 27545 Urban Sunset<sup>®</sup> Maple



Zone: 5 Height: 35' Spread: 20' Shape: Narrow pyramidal to upright oval Foliage: Dark green, glossy Fall Color: Deep red

Compact, upright and narrow, this tree calipers well and develops a naturally uniform canopy with minimal pruning. Easy to grow and relatively problem free, it produces few seeds and develops an ideal, upright street tree form.

# Image: set of the set of

Shade your landscape with style! Glossy, heat resistant foliage defies heat and humidity by maintaining its rich, deep purple color through the summer months.



## Aesculus glabra **Ohio Buckeye**



**Zone:** 4 Height: 35' Spread: 30' Shape: Broadly oval to rounded Foliage: Dark green, palmately compound Fall Color: Yellow to orange-red Flower: Greenish yellow, in 6" panicles

Native to the central U.S., from western Pennsylvania to eastern Texas, it is known for its shiny brown seeds and distinctive upright habit with branches that droop then bend up at the tips.

## Aesculus flava Yellow Buckeye



**Zone:** 4 Height: 60' Spread: 45' Shape: Upright oval Foliage: Dark green, palmately compound Fall Color: Yelloworange Flower: Yellow, in 7" long clusters

Native to the central Appalachian Mountains and Ohio Valley, this is the largest growing and most magnificent of the buckeyes.

## Aesculus

## Horsechestnut

## Aesculus hippocastanum 'Baumannii' **Baumann Double Horsechestnut**



Zone: 4 Height: 50' Spread: 40' Shape: Broadly oval Foliage: Dark green, palmately compound Fall Color: Yellow Flower: Large double white upright panicles Fruit: Seedless

Profuse, showy blooms that outlast those of the species are sterile. Large panicles of double white flowers show slight tints of red and yellow. Seedless character makes it the favorite horsechestnut for street planting.

## Aesculus × carnea 'Briotii' Briotii Red Horsechestnut



Zone: 4 Height: 30' Spread: 35' Shape: Round Foliage: Dark green, palmately compound Flower: Red, in 10" long clusters

A slow growing, densely branched deciduous tree with a rounded, pyramidal form. Displays a profusion of deep pink to red flower clusters in spring. Produces few, if any seed pods.

# Aesculus - Horsechestnut

# Urban MAPLE

19

Acer truncatum × A. plat. 'JFS-KW187' PP 27545



Elegant, high-gloss, heat and pest resistant foliage is borne on upright, symmetrical branches. With minimal pruning and maintenance, it develops a naturally uniform canopy and ideal street tree form.





Glossy, sharply lobed leaves emerge purple-tinged and bright. This adaptable, cold-hardy and heat-resistant tree is perfect for tough growing conditions and smaller planting sites.

## Aesculus

## Buckeye

## Aesculus x arnoldiana 'Autumn Splendor' **Autumn Splendor Buckeye**



Zone: 4 Height: 35' Spread: 25' Shape: Rounded oval Foliage: Dark green, glossy Fall Color: Maroon red

Flower: Yellow with red throat panicles.

A hybrid cross of Aesculus glabra & Aesculus pavia x flava. An excellent choice for its clean shiny foliage which resists leaf scorch better than many other Buckeyes. The fall color is a rich maroon red.

## Aesculus glabra 'JN Select' Early Glow<sup>™</sup> Buckeye



Zone: 3 Height: 35' Spread: 35' Shape: Oval, rounded with age Foliage: Dark green, palmately compound Fall Color: Orange-red Flower: Yellow-green, upright stalks Fruit: Sparse

Yellow green flower stalks perched atop dark green leaves attract hummingbirds and other pollinators. Bright orange-red fall color arrives earlier in autumn than that of the species. Advantages include an upright growth habit, rounded form and sparse seed production. Clean, healthy foliage resists leaf scorch, leaf blotch and early defoliation that typically affect Ohio buckeyes.





ding Ovation™ Serviceberry





Height: 32' Spread: 30 Shape: Rounded Foliage: Dark green, palmately compound Fall Color: Yellow Flower: Pink with yellow throat, in panicles

Selected from the grounds of Fort McNair in Washington DC, this cultivar boasts improved resistance to leaf blotch disease and beautiful panicles of pink flowers in the spring.

> Alnus Alder

## Alnus glutinosa Black Alder



Zone: 4 Height: 50' Spread: 30' Shape: Broadly pyramidal Foliage: Dark green

Black alder is a fast growing tree for tough sites. It fixes nitrogen, thus it can grow in infertile soil, and it will tolerate extremely wet sites.



**Zone:** 3 Height: 15' Spread: 7 Shape: Upright, narrow Foliage: Green, rounded Fall Color: Orange to red Flower: White Fruit: Edible, purple blue, 3/8"

Narrowly upright form of this North American native is a good fit for tight spaces and a good candidate for hedging. A profuse crop of small white flowers may be followed by small, edible, tasty fruits - if the birds don't beat you to it!

## Amelanchier canadensis **Shadblow Serviceberry**



**Zone:** 3 Height: 10' Spread: 6' Shape: Multi-stemmed shrub Foliage: Green Fall Color: Yellow to red Flower: White, small, in clusters Fruit: Edible, purplish blue, <sup>3</sup>

A multi-stemmed strongly upright large shrub, native to the eastern U.S. and tolerant of wet soils.

Amelanchier × grandiflora 'Autumn Brilliance' Autumn Brilliance<sup>®</sup> Serviceberrv



Zone: 4 Height: 20' Spread: 15 Shape: Upright, moderately spreading Foliage: Medium green Fall Color: Bright red Flower: White, in

clusters Fruit: Edible, purplish blue, 1/4"

An excellent Amelanchier with good form and strong branching. It displays reliable spring bloom and bright fall colors.

## Amelanchier grandiflora 'Princess Diana' Princess Diana Serviceberry



**Zone:** 3 Height: 20' Spread: 15' Shape: Gracefully spreading Foliage: Small, green Fall Color: Brilliant red Flower: White, in clusters Fruit: Edible, purplish blue, <sup>3</sup>

A gracefully spreading small tree with excellent fall color. Fall foliage is spectacular, coloring early and lasting late in the season.

## Amelanchier laevis Allegheny Serviceberry



Zone: 4 Height: 25' Spread: 15 Shape: Upright, oval, irregular Foliage: Small, green Fall Color: Orange Flower: White, in clusters Fruit: Edible, purplish blue, %"

Grown both as tree form and multi-stem. It is a little taller, more upright, and more "tree-like" than most Amelanchier species.



## Amelanchier laevis 'Snowcloud' Snowcloud Serviceberry Zone: 4



Height: 28' Spread: 20' Shape: Upright, oval, good tree form Foliage: Dark green, red tint in spring Fall Color: Scarlet Flower: White in clusters Fruit: Edible, <sup>%</sup>, purplish blue

Selected for upright, tree form growth, this strong growing serviceberry makes a good small street tree.

## Amelanchier laevis 'JFS-Arb' PP 15304 Spring Flurry<sup>®</sup> Serviceberry



Zone: 4 Height: 28' Spread: 20' Shape: Upright oval Foliage: Medium green Fall Color: Orange Flower: White, in clusters Fruit: Edible, purplish blue, %"

A street tree Amelanchier! This Schmidt introduction has exceptional tree form. A dominant central leader supports strongly upward-oriented scaffold branches. Pure white blooms smother a delicate latticework of twigs in spring. These give way to healthy green foliage that turns orange in the fall.

# Asimina

## Pawpaw

## Asimina triloba **Pawpaw**



Zone: 5 Height: 25' Spread: 15' Shape: Rounded Foliage: Medium to dark green Fall Color: Golden yellow Flower: Maroon, bellshaped Fruit: Green, brown when ripe, 2-4" oblong, edible

This adaptable, easy-care North American native tree attracts wildlife while delivering shade, flowers, fruit and fall color. Protein and vitamin-rich oblong brown fruits are reminiscent of banana custard in texture and flavor. For fruit production, plant two or more to ensure cross-pollination.

## Betula

Birch

## Betula 'Penci-2' Royal Frost<sup>®</sup> Birch



vZone: 4 Height: 40' Spread: 25' Shape: Pyramidal Foliage: Purple-bronze Fall Color: Yelloworange to reddish

## **INSECT RESISTANCE:** Japanese beetle

A hybrid of Crimson Frost and Whitespire, this tree combines purple-bronze foliage with an upright pyramidal growth habit. It maintains a strong leader and shows better caliper development and density than other purple leaf birch.

## Betula jacquemontii Jacquemontii Birch



**INSECT RESISTANCE:** 

Betula nigra

**River Birch** 

**INSECT RESISTANCE:** 

Bronze birch borer, Japanese beetle

The bark exfoliates to expose tan, pink or

beautifully with the white barked species.

orange colored younger stems, which contrast

Partial resistance to leaf miner

This tree has the whitest bark of all the birches.

Its trunk seems to almost glow when the tree is

planted among darker foliaged plant material.

Zone: 4

gold

Height: 40'

Spread: 35' Shape: Broadly

pyramidal to rounded Foliage: Medium to dark green

Fall Color: Yellow to

Zone: 5 Height: 40' Spread: 30' Shape: Upright oval Foliage: Dark green, thick, glossy Fall Color: Yellow Betula nigra 'Whit XXV' PP16573 City Slicker® Birch



Zone: 5 Height: 35' Spread: 25' Shape: Broadly pyramidal Foliage: Glossy dark green Fall Color: Yellow

Unusually white bark of this true river birch rivals that of Paper Birch (*B. papyrifera*) and other whitebarked beauties. Glossy dark green foliage shines though the growing season, and then turns golden yellow. From a native stand in Oklahoma, it shows increased tolerance of heat and drought.

## Betula nigra 'Cully' Heritage<sup>®</sup> Birch



Zone: 4 Height: 40' Spread: 30' Shape: Broadly pyramidal Foliage: Light green, glossy Fall Color: Yellow

## INSECT RESISTANCE: Bronze birch borer

A selection of River Birch chosen for its lighter colored bark and large, glossy, light green leaves. The peeling bark exposes mottled patches of cream, orange and pinkish tan colors.



# Betula - Birch

## Betula nigra 'Dickinson' Northern Tribute® Birch **Zone:** 3



Height: 35' Spread: 30' Shape: Upright oval Foliage: Lustrous dark green Fall Color: Yellow

## INSECT RESISTANCE: Bronze birch borer

Superior cold hardiness and adaptability to compacted, dry and varied soils including alkaline. Selected from a large, vigorous seedling found in western North Dakota and introduced by NDSU. Smooth ivory-white bark exfoliates in coppery bronze curls.

## Betula papyrifera **Paper Birch**



**Zone:** 3 Height: 50' Spread: 35' Shape: Oval Foliage: Dark green Fall Color: Yellow

In cooler climates, this is the most permanent and desirable of all white barked birches. Slow to turn white, but a perfect chalk-white when older. Beautiful as a single stem tree or clump form.



**Dakota Pinnacle® Birch** Parkland Pillar<sup>™</sup> Birch - First Editions®





Height: 40' Spread: 25' Shape: Pyramidal to upright oval Foliage: Dark green Fall Color: Golden yellow

## INSECT RESISTANCE: Bronze birch borer

Adaptability, stress tolerance, dark green foliage and exfoliating snow-white bark are winning attributes of this Great Plains native birch. A cold hardy selection from seed of Killdeer Mountain, ND and introduced by North Dakota State University.

## Betula papyrifera 'Renci' **Renaissance Reflection® Birch**



**Zone:** 3 Height: 50' Spread: 25' Shape: Upright pyramidal Foliage: Dark green Fall Color: Yellow

## **INSECT RESISTANCE:** Bronze birch borer

This cultivar was selected by Tom Pinney Jr. for its upright pyramidal shape, brilliant white bark, and high resistance to bronze birch borer. It's faster growing than typical of the species and produces a narrower crown.



## Betula platyphylla 'Fargo' Dakota Pinnacle® Birch



**Zone:** 3 Height: 40' Spread: 15' Shape: Narrowly pyramidal Foliage: Dark green Fall Color: Yellow

## **INSECT RESISTANCE:** Japanese beetle

Developed by North Dakota State University, this very cold hardy birch is well adapted to the tough climate of the northern plains. A stiffly upright, narrowly pyramidal form, combined with dense, dark green foliage and white bark give it a striking appearance.



Pyramidal European Hornbeam

## **Rising Fire® Hornbeam**



## Betula platyphylla 'Jefpark' PP 25468 Parkland Pillar<sup>™</sup> Birch - First Editions®



**Zone:** 3 Height: 30' Spread: 8' Shape: Narrow, columnai Foliage: Dark green Fall Color: Yellow

## **INSECT RESISTANCE:** Japanese Beetle

A fast growing very cold hardy tree well suited to the prairie & urban landscape. Tolerant of heat, drought and alkaline soils. Forms a narrow column of dense dark green foliage that turns golden yellow in the fall, revealing its white bark during the winter months. An excellent accent or screen tree.

## Betula populifolia 'Whitespire Sr.' Whitespire Sr. Birch



**Zone:** 4 Height: 40' Spread: 25' Shape: Pyramidal to oval Foliage: Dark green glossy leaves Fall Color: Yellow

## **INSECT RESISTANCE:** Bronze birch borer, Japanese beetle

Whitespire "Senior" is vegetatively propagateddirectly from the original, superior tree in Wisconsin.

## www.jfschmidt.com

# **Carpinus** - Hornbeam

## Carpinus

## Hornbeam

## Carpinus betulus 'Fastigiata' Pyramidal European Hornbeam **Zone:** 5



Height: 35' Spread: 25 Shape: Dense and compact, narrow when young, becoming oval Foliage: Dark green Fall Color: Yellow

Symmetrical and formal in appearance. It is heat and drought resistant, and seems to be relatively free of disease and pest problems.

## Carpinus betulus 'JFS-KW1CB' PP 22814 **Emerald Avenue® Hornbeam**



**Zone:** 5 Height: 40' Spread: 28' Shape: Broadly pyramidal to ovate Foliage: Deep green Fall Color: Yellow

A stout trunk, strong central leader, and sturdy branch arrangement led to our nicknaming this brawny tree "The Hulk." Vigorous and easy to grow, its performance is impressive on the street. When others look tired during the dog days of summer, Emerald Avenue® maintains healthy deep green foliage, thanks to its superior heat tolerance.

## Carpinus betulus 'Frans Fontaine' Frans Fontaine Hornbeam



**Zone:** 5 Height: 35' Spread: 15 Shape: Narrow, columnar Foliage: Dark green Fall Color: Yellow

Fastigiate form is maintained with maturity, the narrowest of the C. betulus cultivars.

## Carpinus betulus 'Lucas' Lucas Columnar Hornbeam



**Zone:** 5 Height: 30' Spread: 10' Shape: Narrow, columnar Foliage: Dark green, thick Fall Color: Brownish to golden yellow

Dense, tightly columnar form stays narrower than the widely planted 'Fastigiata'. Thick, durable leaves turn from golden yellow to brown and provide winter interest by persisting through the winter months. Tolerates high pH and heavy soils and can be tightly sheared as a narrow hedge or screen.

## Carpinus caroliniana **American Hornbeam** svn. Blue Beech



Zone: 4 Height: 25' Spread: 20' Shape: Oval Foliage: Dark green Fall Color: Yellow to bright orange-red

Eastern U.S. native also known as Ironwood and Musclewood; names inspired by the smooth, gray, irregularly fluted trunk. A widely adapted small tree with outstanding fall color, excellent for naturalistic plantings.

## Carpinus caroliniana 'JFS-KW6' Native Flame<sup>®</sup> American Hornbeam



Zone: 5 Height: 30' Spread: 20' Shape: Upright oval Foliage: Green Fall Color: Red

This versatile native species is ripe for cultivar development, and Native Flame® leads the pack into bright fall colors. Selected for good upright growth and form, and especially for its bright red fall color. It combines the graceful informality of a native with the brilliant colors of a modern cultivar.



## Carpinus caroliniana 'Uxbridge' **Rising Fire® American Hornbeam**



**Zone:** 4 Height: 30' Spread: 15' Shape: Upright, narrow Foliage: Medium green Fall Color: Red to orange

A lively mix of bright red and orange fall colors and distinctive columnar shape combine to offer a new look for a popular and widely adaptable North American native tree. Growers will appreciate its vigorous yet mannerly growth habit and ease of care in the nursery. Ontario, Canada origin promises good cold hardiness.



Carpinus betulus 'JFS-KW1CB' PP 22814



Deep green, handsomely corrugated leaves promise cool summer shade before turning golden yellow in autumn. A tough, adaptable tree with superior heat and drought tolerance.

## www.EmeraldAvenueTrees.com



Catalpa



Heartland® Catalpa





Straight, narrow and tough as nails, this unique form of our native Hackberry is a perfect fit for tight urban spaces.

## Catalpa

## Catalpa speciosa Northern Catalpa



Zone: 5 Height: 50' Spread: 35' Shape: Pyramidal with rounded top, open structure Foliage: Medium green, large leaves Fall Color: Yellowgreen Flower: White, in large

clusters A native of the central United States and known for its tolerance of tough conditions, especially heat and drought. Its branch structure presents a

## Catalpa speciosa 'Hiawatha 2' Heartland® Catalpa

bold, rugged appearance.



Zone: 5 Height: 50' Spread: 25' Shape: Upright narrow oval Foliage: Dark green, large leaves Fall Color: Yellowgreen Flower: White, in large clusters

Narrow form, upright growth habit, uniform branching, and darker green foliage recommend this improved selection of our native Northern Catalpa. Easier to grow in the nursery, it is more suitable for most landscape and street uses than seedling-grown trees of the species.



## Catalpa × erubescens 'Purpurea' Purple Catalpa



Height: 45' Spread: 40' Shape: Rounded Foliage: Purple in spring Fall Color: Yellow Flower: Large white panicles

**Zone:** 5

This Catalpa leafs out in spring with beautiful deep purple leaves that unfurl to a huge size. Large panicles of yellow and purple-spotted white flowers crown the canopy in late spring as the foliage begins its transition to bronze-green summer color.



Cedrus

## Cedar

## Cedrus atlantica 'Glauca' Blue Atlas Cedar



Zone: 6 Height: 60' Spread: 40' Shape: Pyramidal, open Foliage: Silvery blue

A handsome specimen tree, this blue selection can be a truly beautiful plant, especially in an area with ample turf where it can develop naturally.

## Cedrus deodara Deodar Cedar



Zone: 6 Height: 60' Spread: 40' Shape: Broadly pyramidal Foliage: Grey green

A large graceful tree with silvery grey green foliage. Native to Tibet and Afghanistan but long established as a staple in western parks and gardens. Large often horizontal branches with drooping or weeping tips.

## Celtis

## Hackberry

## Celtis occidentalis **Hackberry**



Zone: 3 Height: 45' Spread: 35' Shape: Broad top with ascending, then arching branches Foliage: Light green Fall Color: Yellow

Tolerant of harsh climatic conditions as well as urban abuse, this deeply rooted North American native tree rarely lifts sidewalks. Adapted to high pH soils and periodic flooding, it also tolerates extremes of heat, cold and drought. Tough, corky bark adds visual interest and protects against damage.

## www.jfschmidt.com

## Celtis 'Magnifica' Magnifica Hackberry Zone: 5



Height: 50' Spread: 40' Shape: Broadly oval to vase Foliage: Medium green Fall Color: Yellow

This Hackberry selection develops a large, arching canopy similar to that of an Elm. Thought to be a hybrid of *C. occidentalis* and *C. laevigata*, it exhibits faster growth and better insect resistance than its parents.

## Celtis occidentalis 'JFS-KSU1' Prairie Sentinel<sup>®</sup> Hackberry



Zone: 4 Height: 45' Spread: 12' Shape: Tightly fastigiate, columnar Foliage: Medium green Fall Color: Yellow

This fastigiate hackberry fills the need for a columnar tree for narrow city streets in the toughest climates. Discovered in the rugged high plains of western Kansas, it has great adaptability to heat, drought, and cold of the prairie and harsh urban sites.

## Cercidiphyllum

Katsura Tree

## Cercidiphyllum japonicum Katsura Tree



Zone: 5 Height: 40' Spread: 40' Shape: Upright and pyramidal when young, rounded with

age Foliage: Bluish-green Fall Color: Yellow or apricot orange

A tree of variable form: Single stem trees are usually upright when young, while multi-stem plants are usually spreading. The beautiful heart shaped foliage and the delicate, fine texture make this tree an eye catcher in parks and gardens.



## Cercidiphyllum japonicum 'Biringer' PP 21711 Hanna's Heart<sup>®</sup> Katsura Tree



Zone: 4b Height: 27' Spread: 15' Shape: Upright oval Foliage: Dark green Fall Color: Yellow to orange

The smaller, narrower stature of this mannerly Katsura is a good fit for today's garden landscapes. Dark green, distinctively heart-shaped leaves are thick and heavily textured when young. It has demonstrated good hardiness in Zone 4b, with fall colors lasting a bit longer than others of the species.

# Cercidiphyllum japonicum 'Kooldak' KoolKat® Katsura



Zone: 3b Height: 35' Spread: 25' Shape: Pyramidal opening with age Foliage: Bronze changing to blue green Fall Color: Yellow

A very cold hardy selection of Katsura introduced by the North Dakota State research foundation. The tree has survived without damage in USDA Zone 3 at -37 °F. The foliage emerges a deep bronze color and the changes to blue green through the growing season until turning an apricot yellow in the early fall. Early fall dormancy helps with its winter hardiness.



Redbud

## Cercis canadensis Eastern Redbud



Zone: 5 Height: 25' Spread: 30' Shape: Multi-stem or low branching tree Foliage: Medium green Fall Color: Yellow Flower: Reddish purple in bud, rosy-pink when open

Clusters of bright rosy-pink to magenta blooms crowd along the winter-bare branches of this springtime favorite, weeks before its heart-shaped green leaves emerge. It's an attractive small shade tree and a fine choice for naturalized garden areas and woodland edges.

## **Cercis -** Redbud

25



Flame Thrower® Redbud

## Cercis canadensis 'Appalachian Red' Appalachian Red Redbud



Zone: 5 Height: 20' Spread: 25' Shape: Multi-stem or low branched, spread-

ing Foliage: Dark green Fall Color: Yellow Flower: Bright pink flowers emerge from magenta buds

This cultivar has the brightest flowers we have seen in a Eastern redbud. Magenta buds open to shockingly bright pink blooms, often described as neon pink or hot pink, quite different from the lavender tinted soft pink more typically seen in the species. It flowers heavily and has excellent dark green summer foliage.

## Cercis canadensis 'NC216-2' PP 31260 Flame Thrower<sup>®</sup> Redbud



Zone: 5 Height: 15' Spread: 15' Shape: Rounded Foliage: Multi-colors; red, orange, yellow, green Fall Color: Medley of reds, burgundy, yellow, orange Flower: Bright pink

Bright pink flowers of spring are upstaged by heart-shaped leaves that deliver a season-long, kaleidoscopic array of bright colors that change from shades of deep burgundy to red to burnt orange, bright yellow, green and gold. This controlled cross of Ruby Falls and The Rising Sun takes the species to a dramatic new level. Introduced by North Carolina State University. Cercis - Redbud



## Pink Pom Poms Redbud

Northern Herald® Redbud

Lavender Twist® Redbud

Cercis canadensis 'Forest Pansy' Forest Pansy Redbud



Height: 20' Spread: 25' Shape: Upright spreading branches, rounded Foliage: Deep purple paling to bronze-green Fall Color: Yellow orange Flower: Magenta rose

**Zone:** 5

A highly prized red-leaved selection of Eastern Redbud. Delicate magenta rose flowers appear before the foliage. New growth is exceptionally glossy.

## Cercis canadensis 'NC2015-12' PP 31658 Golden Falls<sup>®</sup> Redbud



Zone: 5 Height: 10' Spread: 4' Shape: Weeping Foliage: Golden yellow to lime green, heart shaped Fall Color: Golden yellow Flower: Lavender pink

Lavender pink blooms that tumble from gracefully weeping bare branches are followed by orangetinged, heart-shaped golden leaves. True to its name, its heat and sun tolerant foliage presents a cascade of golden foliage that matures to lime green in late summer.

## Cercis canadensis 'UMN7101' Heart's Desire<sup>™</sup> Redbud



Zone: 4 Height: 15' Spread: 20' Shape: Rounded, spreading Foliage: Medium green Fall Color: Yellow Flower: Lavender pink

Blooming beautifully for more than 40 years in the Minnesota Landscape Arboretum, this time-tested, exceptionally hardy introduction of the University of Minnesota welcomes spring with a profusion of lavender pink blooms. The stunning display of flowers is a welcome sight after the long, dark days of winter.



## Cercis canadensis 'Morton' Joy's Pride™ Redbud



Zone: 5 Height: 15' Spread: 20' Shape: Oval to spreading Foliage: Green, heartshaped Fall Color: Yellow Flower: Bright lavender pink

Bright blooms bring joy to Morton Arboretum visitors, where Joy's Pride<sup>™</sup> was discovered and named for the arboretum's founder, Joy Sterling Morton. Proven reliably cold hardy by Chicagoland winters in which temperatures have plunged as low as -34 °F.



## Cercis canadensis 'Covey' Lavender Twist<sup>®</sup> Redbud



Zone: 5 Height: 7' Spread: 8' Shape: Weeping Foliage: Medium green Fall Color: Yellow Flower: Magenta buds open rosy pink

Elegant and graceful, weeping and compact, this plant creates a great feature in a small garden. Springtime's tight clusters of bright magenta buds open to reveal rosy pink flowers. Slightly zigzagging branches cascade to form lattice work curtains of heart-shaped foliage.

## Cercis canadensis 'Merlot' PP 22297 Merlot Redbud



Zone: 6 Height: 18' Spread: 20' Shape: Upright spreading, rounded Foliage: Glossy, deep purple becoming bronze purple Fall Color: Yellow Flower: Magenta rose

Compact form and glossier, more heat resistant leaves than those of Forest Pansy suggest better performance in warm climates. Selected from the second generation of a cross of 'Texas White' x 'Forest Pansy' by Dennis Werner of NCSU.

www.jfschmidt.com

26

# Chamaecyparis - Alaskan Cedar

## Cercis canadensis 'Pink Trim' Northern Herald<sup>®</sup> Redbud



Zone: 4 Height: 20' Spread: 20' Shape: Rounded Foliage: Dark green, leathery Fall Color: Yellow Flower: Bright magenta pink, profuse Fruit: Sparse

This extremely cold hardy selection discovered in central South Dakota brings bright pink blooms to prairie and mountain landscapes. Introduced by North Dakota State University, its dark green, leathery leaves are heat resistant and wind tolerant.

**Zone:** 5

## Cercis canadensis 'WFHnoli' Northern Lites<sup>™</sup> Redbud



Height: 20' Spread: 25' Shape: Low branched or multi-stem tree, rounded Foliage: Dark green Fall Color: Yellow Flower: Bright hot pink

Brilliant pink blooms burst from the bare branches of this springtime wonder. Selected by Ohio plantsman Bill Hendricks of Klyn Nurseries, it is reliably cold hardy in Zone 5. Dark green summer foliage turns a warm shade of yellow in autumn.

## Cercis texensis 'Oklahoma' Oklahoma Redbud



Height: 20' Spread: 25' Shape: Upright spreading to rounded Foliage: Glossy, thick, bright green Fall Color: Yellow Flower: Reddish-pink buds open to bright magenta-pink

**Zone:** 6

Heat resistant foliage is deep green, bright and glossy. One of the most impressive redbuds in flower, it is more colorful than the species as its intense reddish pink buds open to a slightly brighter shade of magenta-pink.

## Cercis canadensis 'Pink Heartbreaker' PP 23043 Pink Heartbreaker Redbud



Zone: 5 Height: 12' Spread: 8' Shape: Weeping, spreading Foliage: Dark green Fall Color: Yellow Flower: Lavender pink

Lavender pink flower clusters cling tightly to the weeping branches of this vigorous, heat and drought tolerant cultivar. Spring growth flushes red and matures to dark green. Form is wider spreading and more irregular in branch habit than Lavender Twist<sup>®</sup>.

## Cercis canadensis 'Pink Pom Poms' PP 27630 Pink Pom Poms Redbud



Zone: 6b Height: 20' Spread: 15' Shape: Rounded Foliage: Glossy green Fall Color: Yellow Flower: Reddish purple, double Fruit: Seedless

Uniquely double-petaled flowers are borne in dense, pendulous clusters along bare branches in early spring. This hybrid of double-flowered *C. canadensis* 'Flame' and *C. texensis* 'Oklahoma' was developed at North Carolina State University by Dr. Dennis Werner.

## Cercis canadensis 'Ruby Falls' PP22097 Ruby Falls Redbud



Zone: 5 Height: 8' Spread: 6' Shape: Weeping Foliage: Deep purple, glossy Fall Color: Yellowbronze Flower: Rose purple

Pendulous branches laden with clusters of rose purple blooms tumble from the trunk of this petite weeping tree in early spring. Glossy, deep purple, heart-shaped leaves soon follow. This NCSU creation blends the best features of its popular parents, Lavender Twist<sup>®</sup> and Forest Pansy.



## Cercis canadensis 'Vanilla Twist' PP 22744 Vanilla Twist Redbud



Zone: 5 Height: 8' Spread: 6' Shape: Weeping Foliage: Light green Fall Color: Yellow Flower: White

Pure white, pea-like flowers smother the twisting, cascading branches of this hybrid of Lavender Twist<sup>®</sup> and Royal White Redbuds in springtime. Foliage soon follows, emerging chartreuse and maturing to light green, heart shaped leaves that turn yellow in autumn. Observed to have good resistance to drought and cold.



Chamaecyparis

## Alaskan Cedar

Chamaecyparis nootkatensis 'Green Arrow' Green Arrow Alaskan Cedar



Zone: 4 Height: 30' Spread: 5' Shape: Narrowly columnar Foliage: Dark bluish green

This faster growing, much narrower form of Weeping Alaskan Cedar typically forms a very narrow column of dark green, pendulous foliage. Unique shapes evolve as occasional branches grow horizontally from the main column. An excellent landscape specimen or focal point, it can also be used in group plantings where space is at a premium.

## Chamaecyparis nootkatensis 'Pendula' Weeping Alaskan Cedar



Zone: 5 Height: 30' Spread: 10' Shape: Narrow, conical Foliage: Light green

A gracefully weeping top and pendulous branches cascade from an upright central trunk to create a remarkable sculptural landscape specimen.

# Chamaecyparis - Hinoki Cypress





## Chamaecyparis

Hinoki Cypress

## Chamaecyparis obtusa 'Aurea' Golden Hinoki Cypress



Height: 15' Spread: 12' Shape: Broadly pyramidal Foliage: Yellow Fall color: Coppery bronze

**Zone:** 5

Spreading, graceful sprays of refined evergreen foliage sport golden yellow tips that stand out against the medium green, mature foliage of interior branches. The striking contrast brings a great mix of color and texture to the garden.

## Chamaecyparis obtusa 'Gracilis' Slender Hinoki Cypress



Zone: 5 Height: 15' Spread: 10' Shape: Irregularly pyramidal Foliage: Dark green

## Fringetree Chionanthus virginicus

## Fringetree



Zone: 4 Height: 18' Spread: 20' Shape: Oval to spreading Foliage: Medium to dark green Fall Color: Yellow Flower: Small greenish-white flowers borne in clusters, fragrant

In late spring, masses of fragrant and feathery blooms cover the branches of this tree whose Latin name translates to "Snow Flower." Adaptable to varied soils and climates, and quite tolerant of urban conditions.

Chionanthus

## Chionanthus retusus Chinese Fringetree



Zone: 5 Height: 20' Spread: 20' Shape: Broadly oval Foliage: Deep green Fall Color: Bright yellow Flower: White, snow-

like, in large clusters

This small ornamental has multi-season appeal. In late spring, snow white flowers cover the branch tips. Dark green summer foliage change to bright yellow in the fall, then winter brings emphasis to attractive gray bark on the trunk and lower branches.

## Chionanthus retusus 'Tokyo Tower' **Tokyo Tower Fringetree**



Zone: 5 Height: 20' Spread: 10' Shape: Narrow upright vase Foliage: Deep green Fall Color: Bright yellow Flower: White, snowlike, in large clusters Fruit: Small. blue-black

Four seasons of beauty recommend this small tree. Upright branches are smothered in clouds of white flowers in spring. Glossy dark green leaves of summer turn bright golden yellow in autumn and are accented by small blue-black fruits. Golden-tan exfoliating bark lends winter interest to its narrow winter silhouette.

## Chitalpa

## ×Chitalpa tashkentensis 'Strawberry Moon' Strawberry Moon Chitalpa



Zone: 6 Height: 40' Spread: 35' Shape: Rounded with an open structure Foliage: Dark green, large leaves Fall Color: Yellow Flower: Pink to purple in large clusters

www.jfschmidt.com

Large clusters of rich pink-purple flowers crown the canopy of this unique hybrid in early summer. Tree form and branch structure are superior to earlier *Chitalpa-Catalpa* selections. Reduced fruit set and smaller leaves than those of Northern Catalpa are additional features of this exciting new from the U.S. National Arboretum in Washington D.C.



Showy cascades of fragrant white pea-like blooms are spectacular in May and June. Compound leaves and arching branches give an elm-like shape to this urban-tolerant native shade tree.

## Cladrastis kentukea 'Perkins Pink' Perkins Pink Yellowwood



Zone: 4 Height: 30' Spread: 30' Shape: Round Foliage: Green leaflets, compound Fall Color: Yellow Flower: Pink, in pendulous chains

Wisteria-like chains of fragrant, pale pink flowers, 10-15 inches in length, are showstoppers in late spring. Refined, compound leaves cast dappled shade. Deep-rooted and tolerant of dry soils and acid to alkaline growing conditions.

Fanlike, rounded sprays of dark green foliage form an irregularly pyramidal tree. Somewhat open in form, its graceful, slender form matches its descriptive name. Soft texture and narrow form recommend its use as an informal hedge or visual screen.

## Cl



## Cornus

**Cornelian Cherry** 

## Cornus mas Cornelian Cherry



Zone: 5 Height: 18' Spread: 22' Shape: Low branched, rounded Foliage: Glossy dark green Fall Color: Slight to reddish purple. Flower: Small, yellow, in masses Fruit: Bright red, cherry like

In form and fruit, this tree could be mistaken for a crabapple. Its exfoliating bark and masses of bright yellow flowers that appear very early in the spring make it unique.

## Cornus mas 'Golden Glory' Golden Glory Cornelian Cherry



Height: 22' Spread: 18' Shape: Broadly oval Foliage: Glossy dark green Fall Color: Slight to reddish purple Flower: Small, bright yellow, in mass Fruit: Bright red

Zone: 4

Featuring a more upright growth habit, glossier foliage, and brighter yellow flowers, this improved cultivar makes a more uniform and better looking specimen than the species.

## Cornus mas 'JFS PN4Legacy' Saffron Sentinel® Cornelian Cherry



Zone: 4 Height: 22' Spread: 12' Shape: Columnar Foliage: Dark green Fall Color: Dark reddish purple Flower: Bright yellow Fruit: Bright red, ½", oblong Bark: Dark brown, exfoliating

Bright yellow flowers emerge along winter-bare branches of this vigorous, symmetrical, columnar tree. Dark green foliage follows, remaining clean through the summer months before turning deep crimson in autumn. Tart and tasty bright red fruit ripens in late summer to early fall. Attractive dark brown bark exfoliates with age.

# Cornus

## Cornus controversa 'June Snow-JFS' June Snow™ Dogwood



Zone: 5 Height: 30' Spread: 40' Shape: Horizontally layered, spreading Foliage: Dark green Fall Color: Orange to red Flower: White, in flat topped clusters Fruit: Blue-black, ¼", clustered

Fast growing and wide spreading, with branches developing a horizontally tiered appearance. Flat topped clusters of white flowers often exceed 6" in diameter. Outstanding fall color; mottled orange-yellow, red, and purple-red.

## Cornus florida rubra

## Pink Flowering Dogwood Zone: 5



Zone: 5 Height: 20' Spread: 20' Shape: Upright spreading, rounded crown Foliage: Green Fall Color: Red Flower: Pink

The pink flowering dogwood is an old time favorite for good reason. Delicate pink flower bracts smother its branches in spring.





**Cornus -** Dogwood





## Cornus florida 'Comco No. 1' Cherokee Brave Dogwood



Zone: 5 Height: 25' Spread: 22' Shape: Upright spreading, rounded crown Foliage: Dark green Fall Color: Red Flower: Reddish-pink with white center

### **DISEASE RESISTANCE:** Spot anthracnose and powdery mildew

The most vigorous of the pink flowered dogwoods, this cultivar shows resistance to both powdery mildew and spot anthracnose. Well branched in the nursery, it is impressive for its size, deeply colored foliage, and bloom.

## Cornus florida 'Cherokee Chief' Cherokee Chief Dogwood



Zone: 6 Height: 20' Spread: 20' Shape: Upright spreading, rounded crown Foliage: Dark green Fall Color: Red Flower: Rose red to ruby red

This cultivar is noted for its red flowers, much deeper in color than the delicate pink of *C. florida rubra*.

29

# **Dogwood Quick Reference**

Variety	Zone	н	w	Flower	Foliage
Cornelian Cherries					
Cornelian Cherry	5	18'	22'	Small, yellow, in masses	Glossy dark green
Golden Glory Cornelian Cherry	4	22'	18'	Small, bright yellow, in mass	Glossy dark green
Saffron Sentinel® Cornelian Cherry	4	22'	12'	Bright yellow	Dark green
Florida Varieties					
Pink Flowering	5	20'	20'	Pink	Green
Cherokee Brave	5	25'	22'	Reddish-pink with white center	Dark green
Cherokee Chief	6	20'	20'	Rose red to ruby red	Dark green
Cherokee Princess	6	24'	20'	White	Green
Cloud 9	5	15'	20'	White	Green
Prairie Pink	6	20'	20'	Light pink	Glossy green
Kousa Varieties					
Chinese Kousa	5	20'	20'	White	Medium green
Galilean®	4	25'	20'	White	Dark green
Heart Throb <sup>®</sup>	5	20'	20'	Rose pink	Dark green
Milky Way Select	5	15'	15'	Large creamy white bracts	Dark green
Satomi	5	20'	20'	Rose pink	Light green
Scarlet Fire®	5	20'	18'	Fuchsia pink	Dark green
Summer Fun	5	18'	15'	White	Variegated white and green
Summer Gold	5	15'	15'	White	Variegated yellow and green
Hybrid Varieties					
Celestial®	6	20'	20'	White	Green
Eddie's White Wonder	6	25'	20'	Large white bracts	Dark green
Starlight®	6	30'	20'	Large, creamy white	Deep green
Stellar Pink <sup>®</sup>	6	20'	20'	Light pink	Green
Venus®	5b	25'	20'	Very large, 6", creamy white	Deep green
Other Varieties					
June Snow™	5	30'	40'	White, in flat topped clusters	Dark green

See this chart with color photos and more information at https://jfschmidt.com/resources/tree-information-charts/

## Cornus florida 'Cherokee Princess' Cherokee Princess Dogwood



Zone: 6 Height: 24' Spread: 20' Shape: Upright oval, rounded crown Foliage: Green Fall Color: Red Flower: White

One of the best of the white flowering dogwoods, its branches are smothered by large blooms in spring. These give way to slightly glossy green, disease resistant leaves that turn bright red in autumn. Upright, oval form gives room to garden or to sit in its shade.

## Cornus florida 'Cloud 9' Cloud 9 Dogwood



Zone: 5 Height: 15' Spread: 20' Shape: Spreading, broadly rounded crown Foliage: Green Fall Color: Red Flower: White

Heavy production of large white flowers at an early age. The rounded flower bracts are overlapping and give a clean white appearance.

## Cornus florida 'Prairie Pink' Prairie Pink Dogwood



Zone: 6 Height: 20' Spread: 20' Shape: Upright spreading, rounded crown Foliage: Glossy green Fall Color: Orange red to purple red Flower: Light pink

Soft pink flowers cover the tree in spring and give way to thick glossy leaves that resist the tough climate of the plains. Selected at Kansas State University as a top performer for the Great Plains.

Cornus kousa chinensis Chinese Kousa Dogwood



Zone: 5 Height: 20' Spread: 20' Shape: Wide vase to rounded, layered branches Foliage: Medium green Fall Color: Reddish Flower: White

Four large white bracts form star shaped "flowers" in June. An unusual and beautiful dogwood that is hardier, more drought tolerant and disease resistant than *C. florida*.

## Cornus kousa chinensis 'Galzam' Galilean® Dogwood



Height: 25' Spread: 20' Shape: Vase Foliage: Dark green Fall Color: Orange yellow Flower: White Fruit: Red

Zone: 4

Large, hunter green leaves emerge in spring and are followed in late spring by extra-large white flowers that smother the branches of this robustgrowing tree. Red fruits of late summer resemble large strawberries.

## Cornus kousa 'Schmred' Heart Throb<sup>®</sup> Dogwood



Height: 20' Spread: 20' Shape: Rounded Foliage: Dark green Fall Color: Deep red Flower: Rose pink Fruit: Red, ¾"

**Zone:** 5

Large, rose pink flower bracts form flower heads that reach four inches in diameter. Introduced by Don Schmidt Nursery, its handsome blooms last as long as two months in Oregon.

## Cornus kousa 'Milky Way Select' Milky Way Select Dogwood



Height: 15' Spread: 15' Shape: Rounded to wide vase Foliage: Green Fall Color: Bright red Flower: Large creamy white bracts Fruit: Red, ¾"

**Zone:** 5

Selected for its heavy and long lasting display of creamy white flowers, each composed of four large bracts. This showy cultivar also features abundant bright orange-red fruit and excellent orange-red to red autumn color.



## Cornus kousa 'Satomi' Satomi Dogwood



Zone: 5 Height: 20' Spread: 20' Shape: Vase to rounded Foliage: Light green Fall Color: Red Flower: Rose pink

Rose pink blooms perch atop the branches of Satomi Dogwood in late spring. Raspberry-like fruits appear in late summer among the light green leaves that turn varied shades of red in the fall.

## Cornus 'Rutpink' PP 28311 Scarlet Fire® Dogwood



Zone: 5 Height: 20' Spread: 18' Shape: Broadly oval Foliage: Dark green Fall Color: Maroon Flower: Large bracts, deep pink to fuchsia Fruit: Red, 1"

## DISEASE RESISTANCE:

Dogwood anthracnose and powdery mildew

Dramatic fuchsia-pink blooms float atop dark green foliage in late spring and last for several weeks. Each bloom, formed by pointed bracts that do not overlap, resembles a four-pointed star. Leaves emerge with purple blush. Developed by Dr. Tom Molnar at Rutgers University.

## Cornus kousa 'Summer Fun' Summer Fun Dogwood



Zone: 5 Height: 18' Spread: 15' Shape: Rounded to wide vase Foliage: Variegated, white and green Fall Color: Red orange with pink margins Flower: White Fruit: Red, ¾"

White flower bracts of late spring complement rich, boldly contrasting green and cream-white leaves. Leaf margins are brighter white than those of other variegated dogwoods. Vivid fall tones are red orange and pink.

# Cornus kousa 'Summer Gold' PP 22765 Summer Gold Dogwood



Height: 15' Spread: 15' Shape: Rounded to wide vase Foliage: Variegated yellow and green Fall Color: Pink, then red Flower: White Fruit: Red, ¾"

**Zone:** 5

White bracted flowers held above bright green and golden yellow variegated foliage are a flashy, eye catching combination in summer. In autumn, golden margins of the two-tone foliage become pink, and then the entire leaf turns bright red.

## **Cornus -** Dogwood



## Scarlet Fire® Dogwood

## Cornus × 'Rutdan' Celestial<sup>®</sup> Dogwood



Zone: 6 Height: 20' Spread: 20' Shape: Upright spreading Foliage: Green Flower: White

## DISEASE RESISTANCE:

Dogwood anthracnose and powdery mildew

Clean, disease resistant foliage and a heavy annual bloom make this tree both reliable and beautiful. Cream-white flowers have broad, overlapping bracts.

## Cornus kousa × nuttallii 'KN4-43' PP 16293 Starlight<sup>®</sup> Dogwood



Zone: 6 Height: 30' Spread: 20' Shape: Upright oval Foliage: Deep green Fall Color: Red Flower: Large, creamy white Fruit: Red orange, <sup>%</sup>, sparse

## DISEASE RESISTANCE:

Dogwood anthracnose and powdery mildew

Healthy dark green foliage complements the large, firm, creamy white flower bracts that smother its branches in late spring. This hybrid offers the upright growth habit and form of its Pacific dogwood parent, plus the disease resistance of its Chinese dogwood parent.



Venus<sup>®</sup> Dogwood

Stellar Pink® Dogwood

**Burgundy Lace European Filbert** 





Height: 20' Spread: 20' Shape: Upright to upright spreading Foliage: Green Fall Color: Bright red Flower: Light pink Fruit: None

## DISEASE RESISTANCE:

Dogwood anthracnose and powdery mildew

Large and slightly overlapping flower bracts are tinted a delicate shade of soft pink, a little lighter in color than C. florida rubra. Flowering date of the Rutgers series is intermediate between the C. kousa and C. florida parents.

Cornus (kousa × nuttallii) × kousa 'KN 30-8' PP 16309 Venus<sup>®</sup> Dogwood

**Zone:** 5b Height: 25' Spread: 20' Shape: Upright oval Foliage: Deep green Fall Color: Red to purple-red Flower: Very large, 6", creamy white Fruit: Red orange, 3/4", sparse

## DISEASE RESISTANCE:

Dogwood anthracnose and powdery mildew

This vigorous hybrid dogwood combines the huge flowers of the Pacific dogwood with the environmental tolerance of the Chinese dogwood. It has the largest bloom of any dogwood we have seen and is very floriferous and nearly sterile.



Eddie's White Wonder Dogwood

## Cornus 'Eddie's White Wonder' Eddie's White Wonder Dogwood



**Zone:** 6 Height: 25' Spread: 20' Shape: Upright, pyramidal; slightly pendulous branching Foliage: Dark green Fall Color: Red Flower: Large white bracts Fruit: Small red

White flower bracts of this hybrid cultivar are much larger than those of its parent C. florida, and it grows taller. It is also easier to grow and more adaptable that its other parent, C. nuttallii.

# www.jfschmidt.com



## Filbert | Turkish Hazel

## Corylus avellana 'Burgundy Lace' PP 28216 **Burgundy Lace European Filbert**



Zone: 4 Height: 18' Spread: 15' Shape: Upright, spreading Foliage: Cutleaf, burgundy Fall Color: Burgundy to orange Flower: Slender red catkins in late winter Fruit: Small hazelnuts

## DISEASE RESISTANCE:

Eastern filbert blight, Oregon strain

Deeply dissected burgundy leaves mature to bronze-green in late summer. Small edible hazelnuts can develop if a suitable pollinator is nearby. Developed and introduced by Oregon State University, this unique, ornamental form of European Hazel is easily maintained as a small spreading shade tree.

## Corylus colurna **Turkish Hazel (Filbert)**



Zone: 4 Height: 45' Spread: 30' Shape: Pyramidal Foliage: Green Fall Color: Yellow

Featuring boldly textured foliage, rough silvery bark and drought tolerance, this pH adaptable tree forms a pyramidal crown that is especially suitable for shading landscapes in more arid climates.

## Crataegus

Hawthorn

## Crataegus ambigua **Russian Hawthorn**



Zone: 4 Height: 18' Spread: 20' Shape: Rounded to spreading Foliage: Medium green Flower: White Fruit: Deep red

This tough tree from the plains of southern Russia sports white flowers and deep red fruits. Tolerant of drought and alkalinity, it is well adapted to life in the high, dry prairies of the United States and Canada.



## Crataegus crus-galli 'Inermis' **Thornless Cockspur Hawthorn**



Zone: 4 Height: 25' Spread: 25 Shape: Rounded, spreading Foliage: Leathery, deep green, glossy Fall Color: Orange or rusty orange Flower: Small, white in 2" clusters Fruit: Dark red, %"-½", persistent

This small adaptable tree has the excellent foliage of Crataegus crus-galli while completely lacking the dangerous thorns.

## Crataegus laevigata 'Crimson Cloud' **Crimson Cloud Hawthorn**



Zone: 4 Height: 25' Spread: 18' Shape: Oval, with upright spreading wavy branches Foliage: Small glossy areen Flower: Bright red with white centers Fruit: Bright red

## DISEASE RESISTANCE: leaf spot

This tree is distinctive for its wavy branch habit and bright red flowers with white centers.

## $Crataegus \times lavallei$ **Lavalle Hawthorn**



Zone: 4 Height: 28' Spread: 20' Shape: Irregular vase Foliage: Dark green, leathery Fall Color: Bronze Flower: White, in large clusters Fruit: Orange, %"

Lavalle increases its landscape interest as the season progresses. Foliage intensifies from bright glossy green in summer to the bronze-green of fall, which complements its persistent orange to orange red fruit. Its form has strong impact on the winter landscape, with smooth dark bark and an irregularly vase shaped growth habit.

## Crataegus laevigata 'Paul's Scarlet' Paul's Scarlet Hawthorn



Zone: 4 Height: 22 Spread: 20' Shape: Dense, upright spreading, oval Foliage: Small, deeply lobed, green Flower: Double, scarlet to rose Fruit: Sparse, deep red

The brilliant colored flowers make this tree the showiest of all the Hawthorns in the spring. This selection is susceptible to leaf spot.

## Crataegus × mordenensis 'Snowbird' C.O.P.F. **Snowbird Hawthorn**



**Zone:** 3 Height: 22' Spread: 20' Shape: Upright oval to rounded Foliage: Dark glossy green Flower: Small, double white, in clusters Fruit: Bright crimson, %"

Snowbird was introduced by the Morden Research Station in Canada where it originated as a seedling of Toba. It is hardier than Toba and has a glossier, more handsome leaf.

## Crataegus × mordenensis 'Toba'

## Toba Hawthorn



**Zone:** 3 Height: 20' Spread: 20' Shape: Upright, round Foliage: Dark green Flower: In clusters, double white, fading to pink, fragrant Fruit: Red, %

Selected by the Morden Research Station in Canada. A hardy tree with a well behaved branch pattern.

## Crataegus phaenopyrum **Washington Hawthorn**



**Zone:** 4 Height: 25' Spread: 20' Shape: Broadly oval to rounded Foliage: Deep green, very glossy Fall Color: Orange to scarlet and reddish purple Flower: White in clusters Fruit: Bright, glossy red, ¼", persistent

The small attractive fruits blend beautifully with the autumn leaves. Many people rate this the best North American Hawthorn. Very useful in both multi-stem and tree form.

## Crataegus viridis 'Winter King' Winter King Hawthorn



Zone: 4 Height: 20' Spread: 25' Shape: Wide vase, angular branch pattern Foliage: Dark green Fall Color: Yellow Flower: White in clusters Fruit: Bright red, ¼"

Winter King is an attractive Hawthorn with silvery bark that contrasts nicely with dark green, glossy leaves. The strong, angular lines of its branching pattern give it a bold appearance in the winter.

## Eucommia

## Hardy Rubber Tree

## Eucommia ulmoides Hardy Rubber Tree

**Eucommia -** Hardy Rubber Tree



**Zone:** 5 Height: 45' Spread: 45 Shape: Rounded, with ascending branches Foliage: Lustrous dark green

Glossy foliage is reported pest free. This drought and disease resistant tree tolerates a wide range of soil conditions including alkaline.





Fagus - Beech



## Fagus sylvatica 'Dawyck Purple' **Dawyck Purple Beech**



Height: 40' Spread: 12' Shape: Columnar, fastigiate Foliage: Purple

**Zone:** 5

A purple leaf form of Fastigiate Beech. Tight and narrow in form, with purple leaf color that holds well in the summer.





**Zone:** 5 Height: 45' Spread: 15' Shape: Columnar, fastigiate Foliage: Dark green Fall Color: Golden brown

Deep green foliage and the tightness of its fastigiate form make this one of the most striking of columnar trees.

Fagus

Beech

## Faaus arandifolia American Beech



**Zone:** 5 Height: 50' Spread: 40' Shape: Broadly oval Foliage: Glossy green Fall Color: Golden bronze

Slow growing, but ultimately large and magnificent. A mature tree is an imposing sight, with smooth silver-gray bark, lustrous green foliage, and sturdy branch structure.

## Fagus sylvatica Green Beech



Zone: 4 Height: 50' Spread: 40' Shape: Broadly pyramidal to broadly oval Foliage: Glossy dark green Fall Color: Bronze

A large and stately tree with beautiful silverygray bark that contrasts well with its dark green summer foliage.

## Fagus sylvatica 'Asplenifolia' **Fernleaf Beech**



**Zone:** 5 Height: 50' Spread: 40' Shape: Broadly oval Foliage: Cutleaf, green Fall Color: Golden brown

A large growing cultivar with crisp, dark green, cutleaf foliage. The branching gives the tree the appearance of closely layered, fan like sprays.

## Fagus sylvatica 'Purple Fountain' **Purple Fountain Beech**



Zone: 5 Height: 25' Spread: 12' Shape: Weeping from ascending trunk Foliage: Purple to purple-red

Pendulous branches drape from an upright leader as this unusual beech matures into a unique living sculpture. Much faster growing than Purpurea Pendula, its foliage is a slightly lighter shade of purple.

## Fagus sylvatica 'Purpurea Pendula' **Purple Weeping Beech**



**Zone:** 5 Height: 10' Spread: 15' Shape: Broadly weep-Foliage: Purple

Weeping habit and the absence of a central leader form a broad purple dome. A large specimen provides a fantasy-land playground beneath cascading branches.

## Fagus sylvatica 'Red Obelisk' **Red Obelisk Beech**



**Zone:** 5 Height: 35' Spread: 12' Shape: Columnar, compact Foliage: Purple

This columnar purple beech is similar to 'Dawyck Purple', except a little more compact. It features a leaf with an undulating, slightly lobed margin. Excellent for narrow planting sites.

## Fagus sylvatica 'Riversii' **Rivers Purple Beech**



**Zone:** 5 Height: 50' Spread: 40' Shape: Broadly oval Foliage: Deep purple to purple-bronze

The most popular purple leafed beech, Rivers is deep purple in the spring and holds a good purple-bronze color throughout the summer. The smooth silver-gray bark of the trunk is beautiful in winter.





## Fagus sylvatica 'Roseomarginata' Tricolor Beech



Zone: 5 Height: 30' Spread: 20' Shape: Oval Foliage: Variegated, purple with a rose-pink and cream margin

Beautiful foliage is this tree's star attraction. Margins of its purple-bronze leaves are irregularly colored with splashes of rose, pink and cream.

## Franklinia

Franklin Tree

**Zone:** 5





Height: 18' Spread: 12' Shape: Upright spreading, oval Foliage: Dark green Fall Color: Orange-red Flower: Large, white with orange center

This rare tree features three inch, fragrant, white camellia-like flowers with an orange center. Dark green foliage contrasts with the bright summer flowers on this small tree.

## Fraxinus

Ash

## Fraxinus americana 'Junginger' Autumn Purple<sup>®</sup> Ash



Zone: 4 Height: 45' Spread: 40' Shape: Rounded Foliage: Green, heavily textured Fall Color: Reddishpurple Fruit: Seedless

The standard of comparison for White Ash. Beautiful fall colors of various hues in different years vary from mottled yellow orange to orange red and deep purple.

## Fraxinus oxycarpa 'Raywood' Raywood Ash



Height: 45' Spread: 30' Shape: Oval with dense crown Foliage: Narrow green leaflets, fine textured Fall Color: Reddishpurple

Zone: 6

Raywood grows fast as a young tree but matures smaller than other Ash. Slender branches and narrow leaflets give it a delicate, fine textured appearance. Outstanding reddish purple fall color.

Fraxinus pennsylvanica 'Patmore'

## Patmore Ash



Zone: 2 Height: 45' Spread: 35' Shape: Symmetrical upright branches, oval head Foliage: Dark green, glossy Fall Color: Yellow Fruit: Seedless

Patmore probably is the best Green Ash cultivar introduced to date. It has dark green, glossy foliage and a well behaved form, intermediate in shape between Summit and Marshall. Extremely hardy.

## Fraxinus pennsylvanica 'Urbanite' **Urbanite® Ash**



Zone: 5 Height: 50' Spread: 40' Shape: Broadly pyramidal Foliage: Lustrous green, thick and leathery Fall Color: Deep bronze Fruit: Samaras

A well behaved selection of the "Red Ash" type. Very tolerant of city conditions, its thick bark seems more resistant to sunscald than other Ash cultivars.

# Ginkgo

## Maidenhair Tree

## Ginkgo biloba 'Autumn Gold' Autumn Gold Ginkgo



Height: 45' Spread: 35' Shape: Broadly pyramidal Foliage: Medium green Fall Color: Golden yellow Fruit: Seedless

**Zone:** 3

Named for its fan-shaped green leaves that turn to striking golden yellow in autumn, this fruitless male selection is narrow in youth and broadens with age. This air pollution-tolerant tree performs well in compacted and alkaline soils, and is highly resistant to insect feeding and disease.

## Ginkgo biloba 'JFS-UGA2' Golden Colonnade® Ginkgo



**Ginkgo -** Maidenhair Tree

Zone: 4 Height: 45' Spread: 25' Shape: Narrow oval Foliage: Medium green Fall Color: Bright yellow Fruit: Seedless

Thanks to its strongly upright central leader and narrowly oval growth habit, this *Ginkgo* discovered by Dr. Michael Dirr is ideal for narrow street use. The original tree has male flowers and is observed to be seedless.

## Ginkgo biloba 'Blagon' Goldspire Ginkgo



Zone: 4 Height: 45' Spread: 12' Shape: Narrowly columnar Foliage: Green Fall Color: Bright golden yellow Fruit: Seedless

Introduced from France, this densely branched, tightly fastigiate cultivar forms a narrow, symmetrical spire at a younger age than is typical of other columnar selections. Leathery, fan-like foliage turns golden yellow in autumn.


#### Ginkgo biloba 'Halka' Halka Ginkgo

36



Zone: 4 Height: 45' Spread: 40' Shape: Broadly pyramidal becoming oval Foliage: Medium green Fall Color: Bright yellow Fruit: Reported seedless

This tree maintains a good central leader with a particularly uniform and symmetrical branching pattern and excellent density. It is reported seedless and has a slightly broader shape than most cultivars.

#### Ginkgo biloba 'The President' Presidential Gold® Ginkgo



Zone: 4 Height: 50' Spread: 40' Shape: Broadly pyramidal to oval Foliage: Medium green Fall Color: Bright yellow Fruit: Seedless

Pure gold in autumn, its distinctive, fan-shaped green leaves and upright branches form an unusually dense, symmetrical canopy at a young age. This seedless and pest-free tree is tough and adaptable to a wide range of soils and growing conditions.

#### Ginkgo biloba 'Princeton Sentry' Princeton Sentry® Ginkgo



Zone: 4 Height: 40' Spread: 15' Shape: Narrowly pyramidal Foliage: Green Fall Color: Bright yellow Fruit: Seedless

Stiffly upright branches of this very narrow cultivar form a slender, pyramidal crown that's a good fit for city streets. Introduced in 1967 by Plantsman William Flemer III of Princeton Nurseries, this seedless, male selection of the widely adaptable, nearly pest free species has proven to be a top performing urban tree.





### Gleditsia triacanthos 'Christie' Halka<sup>™</sup> Honeylocust



Zone: 4 Height: 40' Spread: 40' Shape: Widely oval to round Foliage: Fine textured, medium green Fall Color: Yellow

One of the favorite Honeylocust cultivars because of its vigorous growth, heavy caliper and symmetrical, full crown. Occasionally reported to produce seeds.

#### Gleditsia triacanthos 'Impcole' Imperial<sup>®</sup> Honeylocust



Zone: 4 Height: 35' Spread: 35' Shape: Rounded Foliage: Fine textured, medium green Fall Color: Yellow Fruit: Seedless

Imperial<sup>®</sup> is small and rounded, the most compact and formal of the popular Honeylocust cultivars. Wide branch angles resist storm damage and create a horizontal spreading branch pattern.

#### Gleditsia triacanthos 'Harve' Northern Acclaim<sup>®</sup> Honeylocust



Zone: 3b Height: 45' Spread: 35' Shape: Broadly pyramidal Foliage: Fine textured, medium green Fall Color: Yellow Fruit: Seedless

Selected by Dale Herman at North Dakota State University for its cold hardiness in the rugged environment of the Great Plains. Northern Acclaim<sup>®</sup> develops a more upright shape than most, similar to Skyline<sup>®</sup>.

### **Thornless and Seedless Honeylocust**

All cultivars we offer have been selected as outstanding plants for a variety of characteristics. All are considered essentially thornless and seedless. However, there are reports from around the country of occasional production of fruit and/or thorns by several cultivars. Unusual weather conditions seem to be the key factor in this. When thorns or seeds are produced in one season, the tree generally reverts back to its normal growth habit the following year.

#### Gleditsia triacanthos 'JFS GMorgenson1' Northern Sentinel<sup>®</sup> Honeylocust



Zone: 4 Height: 45' Spread: 25' Shape: Upright vase to upright oval Foliage: Fine textured, medium green Fall Color: Yellow Fruit: Sparse

Narrowly upright growth habit makes this storm resistant Honeylocust a great fit for street tree plantings where branches must be pruned up for traffic clearance. Found in South Dakota by Plantsman Greg Morgenson, the parent has never been observed to have suffered ice or snow damage. Nor has it produced seed, although we can make no claim of its being seedless under all growing conditions.



### Gleditsia triacanthos 'Shademaster' Shademaster® Honeylocust



Zone: 4 Height: 45' Spread: 35' Shape: Vase to rectangular in outline Foliage: Fine textured, medium green Fall Color: Yellow Fruit: Seedless

INSECT RESISTANCE: Spider mites

Shademaster<sup>®</sup> features upright ascending then spreading branches which produce an irregularly vase shaped form and a slightly rectangular outline. An excellent street tree, its upright branch structure lends itself to pruning for traffic clearance.

#### Gleditsia triacanthos 'Skycole' Skyline<sup>®</sup> Honeylocust



Zone: 4 Height: 45' Spread: 35' Shape: Broadly pyramidal Foliage: Fine textured, medium green Fall Color: Golden Fruit: Seedless

The most widely used Honeylocust cultivar. Its upright spreading branch angles, well behaved form and environmental tolerance make Skyline<sup>®</sup> an ideal street tree in many situations.

Fall Color: Yellow Fruit: Seedless Ided, the most comp Honeylocust cultivar storm damage and

Gleditsia triacanthos 'Harve'



#### Gleditsia triacanthos 'Draves' PP 21698 Street Keeper® Honeylocust



Zone: 4b Height: 45' Spread: 20' Shape: Narrow, strongly upright, tightly pyramidal Foliage: Dark green, fine textured Fall Color: Yellow

An ideal tree for city streets, this cultivar boasts the tight, narrow form that has long been lacking in urban tolerant honeylocust. The ascending branch structure gives Street Keeper® a canopy that is only half as wide as other cultivars. Foliage is deeper green than other selections.

#### Gleditsia triacanthos 'Suncole' Sunburst<sup>®</sup> Honeylocust



Zone: 4 Height: 40' Spread: 35' Shape: Irregular, somewhat rectangular outline Foliage: Bright yellow tip growth Fall Color: Yellowbrown Fruit: Seedless

Treasured for its brilliant display of bright goldenyellow new growth of spring, its fine textured foliage gradually deepens to yellow green as it matures. New leaflets are always bright yellow, sparkling throughout the summer months in bright contrast to the darker yellow green of the interior foliage.

Sunburst<sup>®</sup> Honeylocust

### Gymnocladus

### Kentucky Coffee Tree

#### Gymnocladus dioicus Kentucky Coffee Tree



Zone: 4 Height: 50' Spread: 35' Shape: Oval to vase with upright arching branches Foliage: Green, doubly compound Fall Color: Yellow

Stark and rugged in the winter, this picturesque native of the midwest becomes tropical in appearance in the summer. Huge fans of doubly compound green leaves emerge to cast filtered shade.

#### Gymnocladus dioicus 'Espresso-JFS' Espresso<sup>™</sup> Kentucky Coffee Tree



Zone: 4 Height: 50' Spread: 35' Shape: Oval to vase with upright arching branches Foliage: Frond-like fans of delicate bluish green leaves Fall Color: Yellow Fruit: Seedless

Large, frond-like, doubly compound leaves form a canopy of dappled shade that gives this city-tough tree an airy, tropical feel. The arching branches of this seedless selection present an elm-like shape as the tree matures. Good tolerance of heat, drought, cold and alkaline soils.



#### Gymnocladus dioicus 'Morton' Skinny Latte™ Kentucky Coffee Tree

Zone: 4



Height: 50' Spread: 18' Shape: Narrow vase, nearly columnar Foliage: Green leaflets form large, frond-like fans Fall Color: Yellow Fruit: Seedless

Stiffly upright structural branches ascend vertically to form a remarkably narrow canopy and unique winter silhouette. Originating from a seedling acquired by the Morton Arboretum in 1958, the unique selection is an introduction of ChicagolandGrows<sup>®</sup>.

## ESPRESSO<sup>™</sup> Kentucky Coffee Tree

Gymnocladus dioicus 'Espresso-JFS'



### Wake up to Espresso<sup>™</sup>!

A seedless selection of a city-tough, North American native tree. Upright, arching branches support frond-like fans of delicate leaves that cast refined shade favorable to plant growth and people. Adaptable to drought, heat and cold, Espresso™ resists insects and disease and adapts to varied growing conditions including alkaline and salty soils.



### Halesia carolina 'UConn Wedding Bells' Wedding Bells Silverbell



38

Zone: 5 Height: 20' Spread: 15' Shape: Oval Foliage: Medium green Fall Color: Yellow Flower: White, bell shaped, prolific

Slightly more compact and heavier flowering, this is an ideal landscape Silverbell. Flowers are larger than typical and are borne prolifically along the branches.

### Hamamelis

#### Witch Hazel

#### Hamamelis × intermedia 'Arnold Promise' Arnold Promise Witch Hazel



Zone: 5 Height: 10' Spread: 10' Shape: Upright spreading, low branched Foliage: Green, textured Fall Color: Yellow Flower: Bright yellow

Arnold Promise tends to flower early and heavily. Its yellow flowers are among the brightest of the *Hamamelis*.





#### Hamamelis × intermedia 'Diane' Diane Witch Hazel



Height: 10' Spread: 10' Shape: Upright spreading, low branched Foliage: Green, textured Fall Color: Bright orange-red Flower: Crimson-red

**Zone:** 5

Bright red flowers appear in late winter. Outstanding mix of bright fall colors including yellow-orange, orange-red and bright red.

#### Hamamelis × intermedia 'Jelena' Jelena Witch Hazel Syn. Copper Beauty Witch Hazel



Height: 10' Spread: 10' Shape: Upright spreading, low branched Foliage: Green, textured Fall Color: Bright orange-red Flower: Copperyorange

Zone: 5

One of the most beautiful of the witch hazels for all seasons, 'Jelena' features large flowers that are especially impressive. Petals are red at the base and grade to orange-yellow at the tips, giving an overall bright coppery-orange display. Fall color is outstanding, bright orange to orange red.

### Heptacodium

#### Seven-son Flower

#### Heptacodium miconioides Seven-son Flower



Zone: 5 Height: 15' Spread: 15' Shape: Low branched or multi-stem, arching Foliage: Glossy green Flower: Fragrant white clusters, red calyxes

Calyxes become even more spectacular after the flower petals fall, intensifying to red and holding through autumn. It gives the appearance of blooming twice, first white and then red. Exfoliating bark is attractive and lends interest to the winter landscape.

#### Heptacodium miconioides 'JFS GM1HM' Stars & Sparks™ Seven-son Flower



Zone: 5 Height: 18' Spread: 12' Shape: Upright oval Foliage: Dark green Fall Color: Yellow to orange Flower: White flower clusters, showy red sepals Bark: Tan, exfoliating

Upright growth habit and stout branch structure form a sturdy, small stature tree. Tough and adaptable, its fragrant late summer blooms support pollinators at a time when little else is flowering. Showy red sepals last well into fall, providing a long season of interest. Handsome tan bark exfoliates in long papery strips.

Stars & Sparks™ Seven-son Flower



### Hibiscus

Hibiscus | Rose of Sharon

#### Hibiscus syriacus 'Minfren' Bali™ Hibiscus – First Editions®



Zone: 5 Height: 12' Spread: 8' Shape: Rounded, tree form Foliage: Medium to dark green Flower: Semi-double white, purple-red center

Large, pure white, semi-double flowers flaunt ruffled edges and deep red centers. Blooming profusely from July through September, the tree form brings high-impact beauty to containers and small space gardens. Bred by Minier Nursery of France.

## Hydrangea

### 39

#### Hibiscus syriacus 'Notwoodthree' PP 20574 Blue Chiffon® Rose of Sharon



Zone: 5 Height: 12' Spread: 8' Shape: Upright oval, rounded with age Foliage: Green Flower: Blue

Blue blooms with ruffled centers brighten the landscape with a continuous parade of cool color from mid-summer to late fall. Vigorous growth and adaptability to varied soils, heat and drought make this diminutive tree a great choice for patios and small space gardens.

#### Hibiscus syriacus 'Minspot' Fiji™ Hibiscus - First Editions®

**Zone:** 5



Height: 12' Spread: 8' Shape: Rounded, tree form Foliage: Medium to dark green Flower: Semi-double, white with deep pink center

Pink buds open to white flowers as large as four inches in diameter. Showy, semi-double blooms have ruffled edges, pink centers and distinctive pink veins. Blooms from July to September. Tolerant of dry and moderately alkaline soils.

#### Hibiscus syriacus 'Flamingo' P.A.F. Flamingo Hibiscus



Height: 10' Spread: 8' Shape: Upright, compact Foliage: Dark green Flower: Single, pink

Zone: 5

A new Hibiscus introduced by Oregon State University. This seedless Hibiscus has large numbers of single pink flowers. Strong upright growth but with a compact habit.



#### Hibiscus syriacus 'Notwoodone' Lavender Chiffon<sup>®</sup> Rose of Sharon



Zone: 5 Height: 12' Spread: 8' Shape: Upright oval, rounded with age Foliage: Green Flower: Lavender

Large, frilly lavender flowers provide bright color throughout the summer months while attracting butterflies, hummingbirds and other pollinators. Grown as a small tree, this colorful cultivar is tolerant of heat and varied soils.

#### Hibiscus syriacus 'Jwnwood4' PP 24336 Pink Chiffon<sup>®</sup> Rose of Sharon



Zone: 5 Height: 12' Spread: 8' Shape: Upright oval, rounded with age Foliage: Green Flower: Pink, double

This small tree packs a lot of flower power, thanks to its elegant, clear pink double blooms that appear throughout the summer months. Excellent specimen or background plant, perfect for patios and small space gardens.

#### Hibiscus syriacus 'Mineru' Tahiti™ Hibiscus – First Editions®



Zone: 5 Height: 12' Spread: 8' Shape: Rounded, tree form Foliage: Medium to dark green Flower: Semi-double, purplish pink with deep purple center

Exotic purplish pink flowers as large as four inches in diameter smother the rounded canopy of this small tree from July to late autumn. Drought resistant and tolerant of alkaline soils.

#### Hibiscus syriacus 'Notwoodtwo' White Chiffon<sup>®</sup> Rose of Sharon



Zone: 5 Height: 12' Spread: 8' Shape: Upright oval, rounded with age Foliage: Green Flower: White

Large white flowers, embellished with ruffled edges and fluffy centers, bloom throughout the summer months. The perfect choice for moonlight gardens where these small, flower laden trees lend a luminous glow to evening strolls.





### Hydrangea

#### Hydrangea paniculata 'Renba' PP 28509 Berry White<sup>®</sup> Hydrangea



Zone: 3 Height: 10' Spread: 8' Shape: Upright oval Foliage: Green Flower: White, progressing to dark pink

The sturdy trunk and strong stems of these treeform hydrangeas hold the cone-shaped blooms upright as they deliver an ever-changing parade of color from mid-summer into fall. Flowers emerge white and gradually deepen to pink and then dark pink as they mature.

#### Hydrangea paniculata 'Limelight' Limelight Hydrangea



Zone: 3 Height: 10' Spread: 7' Shape: Upright rounded shrub Foliage: Green Flower: Soft lime green to white, then pink in fall

A strong upright grower with soft lime green flowers emerging through the summer. Flowers slowly progress to white, then change to pink to deep magenta in the fall. Heavy and reliable flowering.

### Hydrangea

#### Hydrangea paniculata 'Bulk' PP 16812 Quick Fire<sup>®</sup> Hydrangea



40

**Zone:** 3 Height: 10' Spread: 8 Shape: Upright spreading shrub Foliage: Dark green Flower: Opens white, aging to pink, very early

Quick to bloom, this cultivar is the earliest of its species to burst into flower, usually about a month before the others. Flower heads begin white and take on a deep pink color as they mature. It's the first to flower and first to become pink in the garden.

#### Hydrangea paniculata 'Renhy' PP 20670 Vanilla Strawberry™ Hydrangea



**Zone:** 3 Height: 10' Spread: 7' Shape: Upright oval, rounded with age Foliage: Medium green Flower: Creamy white, pink, red

Creamy white blooms mature to pink and then strawberry red. As new flowers emerge, they join the more mature blooms to form a frothy blend of vanilla and strawberry red colors in late summer and early fall. Cone-shaped flower heads are excellent for fresh and dried arrangements.



### Koelreuteria

#### **Goldenrain Tree**

#### Koelreuteria paniculata **Goldenrain Tree**



Height: 30' Spread: 30' Shape: Rounded Foliage: Pinnately compound, medium green Fall Color: Yellow Flower: Briaht yellow, in large clusters

**Zone:** 5

An impressive tree in midsummer when it is covered with footlong clusters of bright yellow flowers. One of the few trees to bloom at this time of year.

#### Koelreuteria paniculata 'JFS-Sunleaf' Summerburst<sup>®</sup> Goldenrain Tree



Zone: 5 Height: 30' Spread: 30' Shape: Rounded Foliage: Pinnately compound, glossy dark green Fall Color: Yellow Flower: Bright yellow, in large clusters

Lantern-like seed capsules are blushed with pink. Unusual for its foliage that holds up nicely in summer heat, its leaves are darker green, smoother and more glossy than typical of the species. Discovered by Sunleaf Nursery, Ohio, it is appreciated for its symmetry, heat resistance, and improved foliage quality.



**Zone:** 5 Height: 30' Spread: 12' Shape: Narrowly pyramidal to columnar Foliage: Dark green Fall Color: Yellow orange to orange

Narrow and compact, with sturdy upright branches, this tree is ideal for busy city streets. Slower growing than most sweetgum, it is valued for not outgrowing its space.

#### Liquidambar styraciflua 'JFS KW1LS' Firehouse<sup>®</sup> Sweetgum



**Zone:** 6 Height: 50' Spread: 25' Shape: Pyramidal Foliage: Dark green, lobed Fall Color: Bright red Fruit: Sparse

A dominant central leader, strong branch attachment and upright angles add up to a storm-resistant structure. Compared to others of the species growing nearby, the parent tree growing on a residential street in Oregon defoliates early and has suffered no ice or snow damage. Seed production has been extremely light to none.

#### Liquidambar styraciflua 'Rotundiloba' **Rotundiloba Sweetgum**



**Zone:** 5b Height: 45' Spread: 25' Shape: Pyramidal Foliage: Bright green, rounded lobes Fall Color: Orange to purple Fruit: Fruitless

This is the only Sweetgum known to be entirely fruitless. The foliage is completely unique among sweetgum cultivars, with smooth, rounded lobes.

#### Liquidambar styraciflua 'Slender Silhouette' Slender Silhouette Sweetaum



**Zone:** 5 Height: 60' Spread: 8' Shape: Tightly columnar Foliage: Dark green Fall Color: Orange to burgundy Fruit: Sparse

This fastigiate tree grows quickly to form a tall, strikingly narrow column. One of the tightest and narrowest trees available, it is easier to grow than most. Those grown as hedges guickly become effective visual screens, while single specimens mature to become landscape exclamation points.

Liquidambar styraciflua 'Worplesdon' Worplesdon Sweetgum



**Zone:** 6 Height: 40' Spread: 25' Shape: Broadly pyramidal to oval Foliage: Green Fall Color: Orange and purple

Consistently provides good fall color in the Pacific Northwest. Each of the lobes of the leaf is divided into additional lobes, giving the foliage a unique appearance.



Firehouse® Sweetgum

### Liriodendron

#### **Tulip Tree**

Liriodendron tulipifera **Tulip Tree** 



**Zone:** 5 Height: 60' Spread: 30' Shape: Oval Foliage: Medium green Fall Color: Bright, clear yellow Flower: Yellow to greenish yellow with orange center

A large, fast growing tree, native to the eastern U.S. It flowers in late spring to early summer. Blooms are large, yellow-green with an orange center, and their shape resembles that of a tulip.

#### Liriodendron tulipifera 'Fastigiatum' **Columnar Tulip Tree**



Height: 50' Spread: 15' Shape: Tightly fastigiate Foliage: Medium green Fall Color: Bright vellow Flower: Yellow with orange center

**Zone:** 5

Tall, narrow and tightly fastigiate, it has one of the best forms of columnar trees. Fast-growing selection retains its slender form in maturity.

#### Liriodendron tulipifera 'JFS-Oz' **Emerald City® Tulip Tree**



Zone: 4b Height: 55' Spread: 25' Shape: Upright oval, slightly compact Foliage: Deep green, glossy Fall Color: Bright, clear yellow Flower: Yellow to greenish yellow with orange center

A refined cultivar of our familiar native tulip tree, this uniform growing selection is straighter and more upright, with a dominant central leader and deeper green, slightly glossy foliage.

### Maackia

#### Maackia amurensis Amur Maackia



**Zone:** 3 Height: 25' Spread: 20' Shape: Upright vase with rounded crown Foliage: Medium green Flower: Upright white clusters

A very hardy, small upright tree that grows well in tough environments. This nitrogen-fixer does well in poor soils and flowers in mid-summer when few other trees are in bloom.

#### Maackia amurensis 'JFS-Schichtel1' MaacNificent® Maackia



**Zone:** 3 Height: 30' Spread: 22 Shape: Upright vase Foliage: Green with silvery tint Fall Color: Yellow Flower: White, in upright racemes

The most vigorous Maackia we have seen, with upright branching that forms a beautiful, symmetrical vase shape. Spike-like racemes of white flowers decorate the tree in early summer. The green foliage shows silvery pubescence in spring.



Maackia

Liriodendron tulipifera 'JFS-Oz'



Emerald City® Tulip Tree leaves (right) are deep green, slightly glossy and more refined than those of the species (left).

Tulip-shaped yellow flowers with bright orange centers attract butterflies and hummingbirds. Remarkably dark green leaves cast cool shade and turn buttery yellow in autumn.



Galaxy Magnolia

#### Maclura

Osage Orange

#### Maclura pomifera 'White Shield' White Shield Osage Orange



Height: 35' Spread: 35' Shape: Upright spreading, rounded Foliage: Glossy dark green Fall Color: Yellow Fruit: Fruitless Thorns: Thornless

Zone: 5

Both fruitless and thornless, this tough Midwest native was found in western Oklahoma by plantsman Steve Bieberich. The most thornless of the Osage Orange cultivars, this heat and drought tolerant tree has remarkably dark green, glossy foliage.

Maclura pomifera 'Wichita' Wichita Osage Orange



Zone: 5 Height: 35' Spread: 35' Shape: Upright spreading, rounded Foliage: Glossy dark green Fall Color: Yellow Fruit: Fruitless

Discovered near Wichita, KS, this adaptable urban tree thrives in soil conditions ranging from acid to alkaline and wet to dry. Its strong wood and branch attachments prevent storm damage. Resistant to diseases, insect pests and deer. Nursery grown trees may have a few thorns when young, but become thornless with age.

### Magnolia

#### Magnolia × loebneri 'Ballerina' Ballerina Magnolia Zone: 4



Height: 20' Spread: 20' Shape: Rounded, low branched Foliage: Green Fall Color: Yellowgreen Flower: Large, white with pink blush

Large and fragrant flowers are produced a little later in the spring than similar cultivars, thus escaping many spring frosts.

#### Magnolia grandiflora 'D.D. Blanchard' **D.D. Blanchard Magnolia**



Zone: 6b Height: 35' Spread: 20' Shape: Pyramidal Foliage: Dark green, glossy Fall Color: Evergreen Flower: Large, creamy white

Vigorous, straight and easy to grow, this broadleaf evergreen matures with a slightly open pyramidal form. Fragrant creamy white flowers crown the dark green glossy foliage in springtime. Rusty brown undersides of the leaves are soft and fuzzy, adding a delightful contrast of color and texture.

#### Magnolia grandiflora 'Edith Bogue' Edith Bogue Magnolia



Zone: 6 Height: 30' Spread: 15' Shape: Pyramidal, tight Foliage: Dark green, glossy

**Fall Color:** Evergreen **Flower:** Large, creamy white

Tightly pyramidal in form, Edith Bogue stands up better than others under snow and ice, and is considered one of the hardiest cultivars.

#### Magnolia 'Galaxy' Galaxy Magnolia



Height: 30' Spread: 15' Shape: Pyramidal to oval Foliage: Green Flower: Reddish purple

**Zone:** 5

A tree form deciduous magnolia with a strong central leader. This U.S. National Arboretum introduction is a hybrid of *M. liliflora* and *M. sprengeri* 'Diva'.

#### Magnolia × loebneri 'Leonard Messel' Leonard Messel Magnolia



Zone: 4 Height: 20' Spread: 20' Shape: Rounded, Iow branched Foliage: Green Flower: Deep pink

Flowers are purple-pink in bud. Blooms are large, opening to deep pink on the outside and light pink inside.

#### Magnolia 'NCMX1' PP 29218 Mercury<sup>®</sup> Magnolia



Zone: 5 Height: 25' Spread: 15' Shape: Upright pyramidal Foliage: Dark green Fall Color: Yellow Flower: Bright lavender pink, fragrant

Deep pink buds open to very large lavender pink blooms. Flowering up to a month later than other *M. soulangeana* cultivars greatly reduces risk of frost damage to blooms. A strong central leader and upright branching result in a tree with excellent pyramidal form. Developed by Dr. Tom Ranney of North Carolina State University.



#### Magnolia × loebneri 'Merrill' ('Dr. Merrill') Merrill Magnolia



Zone: 4 Height: 25' Spread: 25' Shape: Rounded, Iow branched Foliage: Green Fall Color: Yellowgreen Flower: Large, white

A hybrid between *M. kobus* and *M. stellata*, Merrill flowers at an early age and flowers heavily. Hardy and reliable.

42

#### Magnolia virginiana 'Jim Wilson' Moonglow<sup>®</sup> Magnolia Zone: 4b



Height: 35' Spread: 18' Shape: Upright oval Foliage: Green, evergreen to semievergreen Flower: Creamy white, fragrant

This vigorous growing cultivar features a more upright form, greater cold hardiness, and evergreen foliage that becomes semi-evergreen in northern climates. Creamy white lemon-scented flowers arrive with the warm weather of late spring and continue into summer.

#### Magnolia stellata 'Royal Star' Royal Star Magnolia



Zone: 5 Height: 15' Spread: 10' Shape: Upright spreading shrub, rounded Foliage: Green Fall Color: Yellow to bronze Flower: White

Flowers are larger than the species with nearly twice as many petals. Often considered the best *M. stellata* cultivar.

#### Magnolia × soulangeana 'Rustica Rubra' Rustica Rubra Magnolia



Zone: 5 Height: 20' Spread: 20' Shape: Upright spreading, rounded Foliage: Green Fall Color: Yellowbrown Flower: Large, rose-red

Rustica Rubra features large rose-red flowers with a whitish interior.

#### Magnolia × loebneri 'Ruth' P.A.F. Spring Welcome® Magnolia



Zone: 3 Height: 20' Spread: 20' Shape: Dense oval to rounded Foliage: Dark green Fall Color: Yellow green to bronze Flower: Pale pink in bud, opening to white

Pink buds unfurl to large, white, multi-petaled blooms that are followed by clean, dark green, heat tolerant leaves. Tested and introduced by North Dakota State University, this pest free, pH adaptable, winter hardy selection blooms reliably even after early spring frosts and winter lows of -35 °F.

#### Magnolia liliflora × stellata 'Susan' Susan Magnolia



Zone: 4 Height: 10' Spread: 10' Shape: Upright spreading Foliage: Medium green Flower: Reddishpurple

Flower buds are long and purple, and open to 5" wide reddish-purple flowers. Heavy flowering.

Spring Welcome® Magnolia

Malus

Crabapple

Zone: 4 Height: 20'

#### Malus 'Adams' Adams Crabapple



Spread: 20' Shape: Dense, rounded Foliage: Green, with red tint in spring Flower: Pink Fruit: Red, %", persistent

DISEASE RESISTANCE: Scab: Good Fireblight: Excel. Cedar-Apple Rust: Excel. Mildew: Good

Deep pink buds open to single pink blooms. This reliable performer has symmetrical form.

#### Malus 'Adirondack' Adirondack Crabapple



Zone: 4 Height: 18' Spread: 10' Shape: Densely upright, an inverted cone Foliage: Medium green Flower: White Fruit: Bright red, ½"

DISEASE RESISTANCE: Scab: Excel. Fireblight: Excel. Cedar-Apple Rust: Excel. Mildew: Excel.

Adirondack is an important cultivar because of its form and outstanding flower display. It is a compact, dense tree with strongly upright form. It produces one of the heaviest flower displays of the crabs. A National Arboretum introduction.

## *Malus -* Crabapple

#### Malus 'Coralcole' Coralburst<sup>®</sup> Crabapple



Zone: 4 Height: 15' Spread: 15' Shape: Compact, dense, round Foliage: Dark green Flower: Coral pink buds, double rose colored flowers Fruit: Yellow-green, ¾"-5"

#### DISEASE RESISTANCE: Scab: Fair Fireblight: Excel. Cedar-Apple Rust: Excel. Mildew: Excel.

Top grafted on a 4' standard, Coralburst<sup>®</sup> is slow growing and forms a very dense, symmetrically rounded head.

#### Malus 'Donald Wyman' Donald Wyman Crabapple



Zone: 4 Height: 20' Spread: 24' Shape: Rounded Foliage: Green Flower: White Fruit: Red, ¾", persistent

#### DISEASE RESISTANCE: Scab: Good Fireblight: Fair Cedar-Apple Rust: Excel. Mildew: Good

Glossy clean foliage gives the tree a fresh appearance all summer. Small bright red fruit is among the most persistent of all crabapples.



Adams Crabapple



### **Crabapple Information Chart**

							DISEASE RESISTANCE			
	SIZE							FIDE	CEDAR-	
NAME	н	W	SHAPE	FOLIAGE	FLOWER	FRUIT	SCAB	FIRE- BLIGHT	APPLE RUST	MILDEW
Adams	20'	20'	Dense, rounded	Green with reddish tint in spring	Deep pink buds open to pink blooms, single	Red, 5%" persistent	Good	Excel.	Excel.	Good
Adirondack	18'	10'	Densely upright, inverted cone	Medium green	White	Bright red, ½"	Excel.	Excel.	Excel.	Excel.
Coralburst®	15'	15'	Compact, dense, rounded	Dark green	Coral pink buds, double rose colored flowers	Bronze, ½"	Fair	Excel.	Excel.	Excel.
Donald Wyman	20'	24'	Rounded	Medium green, glossy and clean	Single, white	Bright red, ¾", abundant, persistent	Good	Fair	Excel.	Good
Firebird®	8'	10'	Rounded, spreading	Dark green	White, opening from red buds	Bright red, 3/8" persistent	Excel.	Excel.	Excel.	Excel.
Golden Raindrops®	20'	15'	Upright, vase shaped	Green, deeply cut	Delicate and starlike, white, profuse	Golden yellow and tiny, 1/4"	Excel.	Poor	Excel.	Excel.
Harvest Gold®	22'	18'	Upright oval	Dark green	White	Yellow, 1/2", persistent	Fair	Fair	Good	Good
lvory Spear®	18'	7'	Narrow, tightly columnar	Dark green	White	Bright red, ½"	Excel.	Excel.	Excel.	Excel.
Lollipop®	10'	10'	Round, compact	Green	White	Bright red, 3/8"	Good	Good	Excel.	Excel.
Louisa	10'	12'	Weeping	Dark green, glossy	True pink	Yellow, ¾"	Excel.	Good	Good	Good
Marilee®	24'	10'	Narrow upright, inverted cone	Medium green	Double, large white	Virtually fruitless	Good	Good	Good	Excel.
Perfect Purple	20'	20'	Rounded	Deep purple	Deep pink to rose red	Purple red, ½"	Fair	Fair	Good	Excel.
Prairie Rose	20'	18'	Rounded	Medium green	Double, deep pink, fragrant	Usually fruitless	Good	Fair	Poor	Good
Prairifire	20'	20'	Upright, spreading, becoming rounded	Red-maroon, aging reddish green	Crimson buds, bright pinkish red, single flowers	Dark red, ¾"-½", persistent	Excel.	Good	Excel.	Excel.
Purple Prince	20'	20'	Rounded	Purple, becoming bronze green	Rose red	Maroon, 3/8"-1/2"	Excel.	Good	Excel.	Good
Radiant	25'	20'	Broad, rounded crown	Red-purple when young, maturing to green.	Deep red buds, single deep pink flowers	Bright red, ½"	Poor	Excel.	Good	Fair
Raspberry Spear®	20'	8'	Narrow upright column	Purple	Magenta pink	Maroon to deep red, ½", persistent	Excel.	Excel.	Excel.	Excel.
Red Barron	18'	8'	Narrow, columnar	Reddish-purple, maturing to bronze-green	Dark red, single	Dark red, 1/2"	Fair	Good	Excel.	Excel.
Red Jewel™	15'	12'	Upright and pyramidal	Green	Pure white, single	Brilliant red, ½", persistent	Good	Fair	Excel.	Good
Rejoice™	20'	18'	Narrow, upright oval	Bronze green	Pale rose-pink	Deep red, ½"	Good	Good	Good	Excel.
Royal Raindrops®	20'	15'	Upright, spreading	Purple, cutleaf	Bright pinkish-red	Red, 1/4", persistent	Excel.	Good	Excel.	Good
Ruby Dayze®	22'	16'	Upright, tightly oval	Purple red, becoming bronze	Bright magenta-pink	Deep red, ¼"	Excel.	Excel.	Excel.	Excel.
Sargent	8'	12'	Low, horizontally spreading dwarf	Dark green	Profuse, single, white, 1/2", fragrant	Small, 1⁄4"-1⁄3", profuse, dark red, persistent	Excel.	Excel.	Excel.	Excel.
Sargent Tina	5'	6'	Small rounded dwarf tree	Medium green, small leaves	Bright red buds opening to single white flowers	Bright red, 1/4"	Excel.	Good	Excel.	Excel.
Snow Crystal™	15'	12'	Pyramidal, compact	Dark green	Single bright white, opening from pink buds	Yellow to golden orange, ¼"	Excel.	Excel.	Excel.	Excel.
Snowdrift	20'	20'	Upright spreading, rounded and dense	Bright green, glossy	Buds pink, flowers single, white.	Orange, small, less than ¾", persistent	Good	Fair	Excel.	Excel.
Sparkling Sprite®	12'	12'	Compact, dense, round	Bright green	White, opening from pink buds	Yellow to golden orange, ¼"	Excel.	Excel.	Excel.	Excel.
Spring Snow	25'	22'	Dense, oval	Medium green	Pure white, fragrant, single	Nearly sterile. Excellent for patios & courtyards.	Poor	Fair	Good	Excel.
Sugar Tyme®	18'	15'	Upright spreading, oval	Green	Pale pink buds, white, single flowers	Red, ½", persistent	Good	Good	Excel.	Excel.
Zumi Calocarpa	20'	24'	Rounded, gracefully spreading	Large green leaves, dense canopy	Buds red, flowers white, single, fragrant, 1¼"	Bright red, glossy, small, 3/6", persistent	Excel.	Excel.	Excel.	Good

See this chart with color photos and more information at https://jfschmidt.com/resources/tree-information-charts/

### **Rootstocks for Crabapples**

Our ornamental crabapples are offered on three distinct apple understocks; domestic, hardy seedling and RightRoot® crabapple rootstock.



Ornamental crabapples are truly trouble free garden trees when grown on RightRoot™ crabapple rootstock. Proven to be the best all-around performer in our multi-year trials, this time-tested clonal understock virtually

eliminates suckering.

In addition to having the lowest number of basal suckers in our tests, trees grown on RightRoot<sup>™</sup> understocks have better anchorage and vigorous growth rate. Additional reasons to choose this improved understock include:

- Extremely cold hardy
- Growth rate is close to domestic
- Produces a faster growing tree than EMLA 111
- Resists collar rot and crown gall
- Does not develop burr knot
- Symmetrical root structure is a good balance of fibrous and structural roots
- Adapts well to various soils, including wet or dry sites

#### **Domestic**

This "old standard" rootstock still gives the best growth rate and produces a very uniform, deep root system. Roots go deep to find water in dry areas, and provide extremely good anchorage. Its main disadvantage is heavy suckering. It is also slightly less cold hardy.

#### Hardy Crabapple Seedling

Dolgo crabapple seedlings are excellent rootstocks for the coldest areas. They produce well-branched root systems, and have a growth rate that is close to that of Domestic. This is the rootstock to have in areas where temperatures drop to -30 °F. with no snow cover. In years of Dolgo seed shortage, we may substitute different but equally hardy crab seedlings, such as Malus antonovka.

#### Malus sargentii 'Select A' Firebird<sup>®</sup> Crabapple



Zone: 4 Height: 8' Spread: 10' Shape: Rounded, spreading Foliage: Dark green Flower: White, opening from red buds Fruit: Bright red, %", persistent

DISEASE RESISTANCE: Scab: Excel. Fireblight: Excel. Cedar-Apple Rust: Excel. Mildew: Excel.

This compact selection of *M. sargentii* features long lasting, high quality fruit. Annual fruit display is more persistent than any other natural dwarf crabapple.

#### Malus 'Schmidtcutleaf' **Golden Raindrops® Crabapple**



**Zone:** 3 Height: 20' Spread: 15' Shape: Upright vase Foliage: Green, deeply cut Flower: White Fruit: Golden yellow, ¼"

DISEASE RESISTANCE: Scab: Excel. Fireblight: Poor Cedar-Apple Rust: Excel. Mildew: Excel.

Fine textured, deeply cut foliage gives this unusual crab a delicate appearance. The form is elegant, with slender limbs spreading horizontally from upright branches. The abundant golden yellow fruit is truly tiny.



#### Malus 'Hargozam' Harvest Gold<sup>®</sup> Crabapple



Height: 22' Spread: 18 Shape: Upright oval Foliage: Dark green Flower: White Fruit: Yellow, ½", persistent

Zone: 4

DISEASE RESISTANCE: Scab: Fair Fireblight: Fair Cedar-Apple Rust: Good Mildew: Good

One of the best yellow fruited crabs, it features neat, crisp, dark green foliage and an upright branch habit.

### **Malus** - Crabapple

#### Malus 'JES KW214MX' PP 31076 Ivory Spear<sup>®</sup> Crabapple



**Zone:** 4 Height: 18 Spread: 7 Shape: Narrow, tightly columnar Foliage: Dark green Flower: White Fruit: Bright red, 1/2"

#### DISEASE RESISTANCE: Scab: Excel. Fireblight: Excel. Cedar-Apple Rust: Excel. Mildew: Excel.

Deep pink buds open to white flowers on this densely upright, narrow crabapple. Leaves stay clean and disease free throughout the growing season, forming a uniform column of dark green foliage in the landscape. Bright cherry red fruits contrast well with the dark green leaves and persist into late autumn, when a touch of yellow fall color adds seasonal interest.





### Malus - Crabapple

#### www.jfschmidt.com



46

Perfect Purple Crabapple Prairie Rose Crabapple





Prairifire<sup>®</sup> Crabapple

Marilee<sup>®</sup> Crabapple

#### Malus 'Lollizam' Lollipop<sup>®</sup> Crabapple DVV



Height: 10' Spread: 10' Shape: Round, compact Foliage: Green Flower: White Fruit: Bright red, %"

#### DISEASE RESISTANCE: Scab: Good Fireblight: Good Cedar-Apple Rust: Excel. Mildew: Excel.

A compact dwarf tree, perfect for formal gardens, patios and courtyards. Fine textured small leaves and dense growth habit create a very symmetrical, globe shaped head. It presents a neat and formal appearance throughout the year.

#### Malus 'Louisa' Louisa Crabapple



Zone: 4 Height: 10' Spread: 12' Shape: Weeping Foliage: Dark green, glossy Flower: True pink Fruit: Yellow, %"

DISEASE RESISTANCE: Scab: Excel. Fireblight: Good Cedar-Apple Rust: Good Mildew: Good

A pink flowered weeping crab with excellent form and dark green, glossy foliage.



#### Malus 'Jarmin' Marilee<sup>®</sup> Crabapple Zone: 4



Height: 24' Spread: 10' Shape: Narrow upright, inverted cone Foliage: Medium green Flower: Double, large white Fruit: Virtually fruitless

DISEASE RESISTANCE: Scab: Good Fireblight: Good Cedar-Apple Rust: Good Mildew: Excel.

Pink buds open to unusually large, white, double blooms. Unique for its stiffly upright, narrow form and virtually fruitless nature, it is an excellent choice for courtyard settings and streetscapes, and for use near utility lines.



#### Malus 'Perfect Purple' Perfect Purple Crabapple



Zone: 4 Height: 20' Spread: 20' Shape: Rounded Foliage: Deep purple Fall Color: Purple Flower: Deep pink to rose red Fruit: Purple red, ½"

DISEASE RESISTANCE: Scab: Fair Fireblight: Fair Cedar-Apple Rust: Good Mildew: Excel.

Deep pink blooms set the spring stage for dark purple foliage that crowns the perfectly rounded canopy of this attractive tree. Very cold hardy, this crab has performed well in the North and Inter-mountain regions.

#### Malus ioensis 'Prairie Rose' Prairie Rose Crabapple



Zone: 4 Height: 20' Spread: 18' Shape: Rounded Foliage: Medium green Flower: Double, deep pink, fragrant Fruit: Usually fruitless

DISEASE RESISTANCE: Scab: Good Fireblight: Fair Cedar-Apple Rust: Poor Mildew: Good

Large and fragrant double pink flowers look like miniature rosebuds. Introduced by the University of Illinois, this selection of the midwest native crabapple is welcomed for its fruitless character.

#### Malus 'Prairifire' Prairifire Crabapple



Zone: 4 Height: 20' Spread: 20' Shape: Upright, spreading, rounded Foliage: Purple, becoming reddish green Flower: Bright pinkish red Fruit: Dark red, ¾"-½"

DISEASE RESISTANCE: Scab: Excel. Fireblight: Good Cedar-Apple Rust: Excel. Mildew: Excel.

One of the best red leafed crabs, Prairifire has impressive landscape impact. Attributes include long lasting bright red flowers, excellent red fruit, and attractive reddish bark.

#### Malus 'Purple Prince' Purple Prince Crabapple Zone: 4



Height: 20' Spread: 20' Shape: Rounded Foliage: Purple, becoming bronze green Flower: Rose red Fruit: Maroon, %" - %"

#### DISEASE RESISTANCE: Scab: Excel. Fireblight: Good Cedar-Apple Rust: Excel. Mildew: Good

The purple bronze foliage and bright flowers of this outstanding rosy bloom crab rival those of Liset. Purple Prince is also faster growing and does not suffer from stem splitting. Probably the best purple foliaged crab for growers, it is also a low maintenance tree in the landscape.

#### Malus 'Radiant' Radiant Crabapple



Height: 25' Spread: 20' Shape: Broad, round crown Foliage:New leaves red-purple, mature to bronze-green Flower: Deep red buds, single pink blooms Fruit: Bright red, ½"

**Zone:** 3

#### DISEASE RESISTANCE: Scab: Poor Fireblight: Excel. Cedar-Apple Rust: Good Mildew: Fair

A hardy University of Minnesota introduction, this tree resists fireblight and performs well in the Rocky Mountain and inter-mountain states.

#### Malus 'JFS KW213MX' PP 31008 Raspberry Spear<sup>®</sup> Crabapple



Zone: 4 Height: 20' Spread: 8' Shape: Narrow upright column Foliage: Purple Flower: Magenta pink Fruit: Maroon to deep red, '2", persistent

#### DISEASE RESISTANCE: Scab: Excel. Fireblight: Excel. Cedar-Apple Rust: Excel. Mildew: Excel.

Deep pink buds open to bright magenta flowers on this tightly columnar crabapple. Clean and disease-free summer foliage holds its dark purple color; bronzing on the older leaves in late summer and early fall, when orange tints appear. Purple-red fruits ripen to deep bright red and persist into late autumn or early winter.

### Malus 'Red Barron' Red Barron Crabapple



Zone: 4 Height: 18' Spread: 8' Shape: Narrow, columnar Foliage: Purple, maturing to bronzegreen Flower: Dark red Fruit: Dark red, ½"

#### DISEASE RESISTANCE: Scab: Fair Fireblight: Good Cedar-Apple Rust: Excel. Mildew: Excel.

Ascending branch structure, narrow form and adaptability to urban conditions have earned Red Barron a place on our UtiliTrees™ list.



#### Malus 'Jewelcole' Red Jewel™ Crabapple



Zone: 4 Height: 15' Spread: 12' Shape: Upright, pyramidal Foliage: Green Flower: White Fruit: Red, ½", very persistent

#### DISEASE RESISTANCE: Scab: Good Fireblight: Fair Cedar-Apple Rust: Excel. Mildew: Good

Bright red fruits are among the most profuse and persistent of any crab, holding fast until spring in mild winter areas, when they are replaced by an abundance of white blooms.

#### Malus 'Rejzam' Rejoice™ Crabapple



Zone: 4 Height: 20' Spread: 18' Shape: Rounded Foliage: Bronze green Flower: Pale rose-pink Fruit: Deep red, ½"

DISEASE RESISTANCE: Scab: Good Fireblight: Good Cedar-Apple Rust: Good Mildew: Excel.

Clouds of rosy-pink flowers are followed by red-tinted foliage that matures to bronze green and becomes deep green in summer. Upright branches and symmetrical form make this easycare crab one of the most uniform looking trees in nursery rows and streetscapes.





Deep pink buds open to bright blooms that thrust a magenta spear into the springtime sky. Dark purple foliage gains orange tints in autumn, when bright red fruits appear.





Bright pinkish red flowers combine with deep purple cutleaf foliage, tiny persistent red fruits, handsome bark and winter silhouette to present a unique, all-season crabapple.

#### Malus 'JFS-KW5' Royal Raindrops® Crabapple Zone: 4



Height: 20' Spread: 15' Shape: Upright spreading Foliage: Purple, cutleaf Fall Color: Orange-red Flower: Bright pinkish red Fruit: Red, 1/4", persistent

#### DISEASE RESISTANCE: Scab: Excel. Fireblight: Good Cedar-Apple Rust: Excel. Mildew: Good

Bright pinkish red flowers combine with deep purple cutleaf foliage to present a unique new crab. Deeply lobed leaves and upright form with good branching and density are inherited from its Golden Raindrops<sup>®</sup> parent. Nursery growth is outstanding, and it displays good to excellent resistance to the common diseases.

#### Malus 'JFS KW139MX' PP 31232 Ruby Dayze<sup>®</sup> Crabapple



Zone: 4 Height: 22' Spread: 16' Shape: Upright, tightly oval Foliage: Purple red, becoming bronze Fall Color: Orange-red Flower: Bright magenta-pink Fruit: Deep red, ¼"

#### DISEASE RESISTANCE: Scab: Excel. Fireblight: Excel. Cedar-Apple Rust: Excel. Mildew: Excel.

This tree scores on all fronts, featuring the most scab resistant foliage among red-leafed crabs that we have yet seen. Growers will love its more upright, tightly oval shape, as will those who maintain landscapes and streetscapes. Beautiful bright magenta-pink flowers are abundant in spring. Deep red fall fruits are tiny and persistent.

## Malus sargentii Sargent Crabapple Zone: 5



Height: 8' Spread: 12' Shape: Low, spreading Foliage: Dark green Flower: White Fruit: Bright red, ¼", persistent

#### DISEASE RESISTANCE: Scab: Excel. Fireblight: Excel. Cedar-Apple Rust: Excel. Mildew: Excel.

A natural dwarf with horizontal spreading branches. These are laden with bright red fruits that persist long into the winter months Outstanding when planted in groups.

#### Malus sargentii 'Tina' Sargent Tina Crabapple



Zone: 5 Height: 5' Spread: 6' Shape: Small rounded dwarf tree Foliage: Medium green, small leaves Flower: Bright red buds opening to single white flowers Fruit: Bright red, ¼"

#### DISEASE RESISTANCE:

Scab: Excel. Fireblight: Good Cedar-Apple Rust: Excel. Mildew: Excel.

This most petite of all crabapples is grown as a top graft. Flowers, fruit and leaves are all quite small.

#### Malus 'JFS KW218MX' PP 34356 Snow Crystal<sup>®</sup> Crabapple



Zone: 4 Height: 15' Spread: 12' Shape: Pyramidal, compact Foliage: Dark green Flower: Single bright white, opening from pink buds Fruit: Yellow to golden orange, ¼"

#### DISEASE RESISTANCE: Scab: Excel. Fireblight: Excel. Cedar-Apple Rust: Excel. Mildew: Excel.

Bright white flowers smother the branches of this densely branched, symmetrical tree in spring. Blooms are followed by dark green leaves that accentuate its distinctively compact, pyramidal form. Yellow to golden orange fruits take the four-season show into the winter months.





#### Malus 'Snowdrift' Snowdrift Crabapple



Zone: 4 Height: 20' Spread: 20' Shape: Upright, spreading, rounded, dense Foliage: Green, glossy Flower: White Fruit: Orange, %", persistent

#### DISEASE RESISTANCE: Scab: Good Fireblight: Fair Cedar-Apple Rust: Excel. Mildew: Excel.

One of the most popular crabs. The crown is very uniform and symmetrical, making it one of the more formal looking crabs.

#### Malus 'JFS-KW207' PP 27954 Sparkling Sprite<sup>®</sup> Crabapple



Zone: 4 Height: 12' Spread: 12' Shape: Compact, dense, round Foliage: Bright green Flower: White opening from pink buds Fruit: Yellow to golden orange, ¼", persistent

#### DISEASE RESISTANCE: Scab: Excel. Fireblight: Excel. Cedar-Apple Rust: Excel. Mildew: Excel.

Pink buds opening to white flowers smother the dense, rounded head of this top-grafted, compact dwarf. Summer foliage is especially clean and bright green. An abundant fruit crop persists well into winter, slowly turning from golden yellow to orange.

## Malus 'Spring Snow' Spring Snow Crabapple Zone: 4



Height: 25' Spread: 22' Shape:Dense, oval Foliage: Medium green Flower: White Fruit: None

#### DISEASE RESISTANCE: Scab: Poor Fireblight: Fair Cedar-Apple Rust: Good Mildew: Excel.

Featuring pure white flowers but no fruit, this is the crabapple to use in locations such as patios and courtyards where fruit would be objectionable. It flowers well on an annual basis.

#### Malus 'Sutyzam' Sugar Tyme<sup>®</sup> Crabapple



Zone: 4 Height: 18' Spread: 15' Shape: Upright, spreading, oval Foliage: Green Flower: White Fruit: Red, ½", persistent

#### DISEASE RESISTANCE: Scab: Good Fireblight: Good Cedar-Apple Rust: Excel. Mildew: Excel.

Fragrant white flowers smother Sugar Tyme® in spring. Persistent red fruits provide a fine fall and winter display.



#### Malus × zumi 'Calocarpa' Zumi Calocarpa Crabapple Zone: 5



Height: 20' Spread: 24' Shape: Rounded, gracefully spreading Foliage: Green Flower: Red buds, white flowers Fruit: Red, %", persistent

#### DISEASE RESISTANCE: Scab: Excel. Fireblight: Excel. Cedar-Apple Rust: Excel. Mildew: Good

Very popular, widely used and time tested, this is a standard for comparison for white flowered crabs. Don't confuse *M. zumi* 'Calocarpa' with straight *M. zumi*.

### **Malus -** Crabapple



49

#### Malus 'JFS-KW207' PP 27954



Fragrant clouds of long lasting flowers smother the densely branched, naturally topiary-shaped canopy of this carefree tree. Tiny fruits attract songbirds and last well into winter. 50

#### www.jfschmidt.com



## Metasequoia

#### Metasequoia glyptostroboides Dawn Redwood



Zone: 5 Height: 70' Spread: 25' Shape: Narrow, conical Foliage: Medium green, deciduous conifer Fall Color: Rusty orange

Light green needles of this fast-growing conifer present a very bright summer appearance. Deciduous character allows winter sun to penetrate and warm buildings that are shaded in summer.

#### Metasequoia glyptostroboides 'Gold Rush' Gold Rush Dawn Redwood (syn. 'Ogon')



Zone: 5 Height: 50' Spread: 20' Shape: Narrow, conical Foliage: Bright yellow, deciduous conifer Fall Color: Rusty orange

The bright yellow summer needles of this large deciduous conifer call for attention in any landscape. Pyramidal and intensely colored, and tolerant of both heat and cold, it is one of the most widely adaptable trees with yellow foliage.



#### Metasequoia glyptostroboides 'JFS-PN3Legacy' Jade Prince<sup>®</sup> Dawn Redwood



Zone: 5 Height: 70' Spread: 25' Shape: Upright, pyramidal Foliage: Bright green, deciduous needles Fall Color: Rusty orange

Lush, feathery spring foliage matures to rich, fresh green in summer. Dense, upright branching and a strong central leader contribute to superior form over seedling grown plants and recommend it for urban and landscape use.





Tupelo

#### Nyssa sylvatica Black Tupelo



Zone: 5 Height: 35' Spread: 20' Shape: Pyramidal when young, spreading and irregular with age Foliage: Dark green, glossy Fall Color: Hot coppery red

Rich green glossy foliage ignites with brilliant fall tones, ranging from scarlet to maroon, yellow and orange. Fissured grey bark provides winter interest. Adaptable to urban conditions including compacted and poorly drained soils and occasional drought.

#### Nyssa sylvatica 'David Odom' Afterburner® Tupelo



Zone: 5 Height: 35' Spread: 20' Shape: Upright pyramidal to oval Foliage: Bright green, glossy Fall Color: Bright red Fruit: Blue-black, <sup>%</sup>"

Symmetrical, uniform and upright branch structure and straight central leader make this cultivar easier to grow and better suited than seedlings of the species for use as a street tree. High gloss foliage shines through the summer and then turns bright red in fall, burning brightly after most tupelo have defoliated.

#### Nyssa sylvatica 'JFS-red' PP 26975 **Firestarter® Tupelo**



Zone: 5 Height: 35' Spread: 18' Shape: Narrow oval to upright oval Foliage: Dark green Fall Color: Bright red Fruit: Seedless

Symmetrical, upsweeping branches and a strong central leader contribute to the remarkably neat and uniform appearance of this relatively narrow tupelo. Dark green foliage turns intensely bright red, coloring earlier in autumn than most cultivars.

#### Nyssa sylvatica 'NSUHH' PP 22951 Green Gable™ Tupelo



Height: 40' Spread: 25' Shape: Pyramidal to broadly pyramidal Foliage: Dark green, glossy Fall Color: Orange red to red Fruit: Seedless

**Zone:** 5

#### DISEASE RESISTANCE: Leaf spot

Upsweeping branches and a dominant central leader create a gable shaped canopy that inspires its name. Dark green and glossy summer foliage shows leaf spot resistance, and develops good red fall color.

#### Nyssa sylvatica 'Haymanred' **Red Rage® Tupelo** Royalty \$1.75



Height: 35' Spread: 20' Shape: Broadly pyramidal Foliage: Dark green, glossy Fall Color: Bright red Fruit: Seedless

**Zone:** 5

#### DISEASE RESISTANCE: Leaf spot

Discovered by plantsman Mike Hayman in southern Indiana, Red Rage<sup>®</sup> features deep green, high gloss summer foliage that resists leaf spot, then turns bright red with the onset of fall weather.

#### Nyssa sylvatica 'Wildfire' Wildfire Tupelo



Height: 40' Spread: 25' Shape: Broadly pyramidal to oval Foliage: Dark green, red new growth Fall Color: Yelloworange to purplish Fruit: Seedless

Zone: 6

This tupelo offers an extra season of brightly colored foliage. Spring brings a surprising flush of deep red new growth, which continues as long as new leaves emerge. Summer foliage is green, changing to autumn tints of orange-yellow to purplish red.

 Red Rage® Tupelo

 Red Rage® Tupelo

#### Ostrya

#### Hophornbeam

#### Ostrya virginiana American Hophornbeam Zone: 4



Height: 40' Spread: 25' Shape: Upright oval Foliage: Dark green Fall Color: Yellow

This handsome small tree performs well in urban settings. Pest resistant and tolerant of drought and alkaline soils, its hard wood resists damage from ice and snow. Hop-like fruits and finely serrated hornbeam-like leaves give this adaptable tree its name.

#### Ostrya virginiana 'JFS-KW5' Autumn Treasure<sup>®</sup> Hophornbeam



Zone: 4 Height: 40' Spread: 20' Shape: Upright pyramidal to oval Foliage: Dark green Fall Color: Golden yellow Fruit: Attractive, hoplike, papery chains

At last, a hophornbeam suited for city living. Predictably upright narrow form facilitates uniform street tree plantings. Unlike many trees of seedling origin that hold brown leaves throughout the winter, fall leaf drop is clean and complete.

#### Oxydendrum

Sourwood

### Oxydendrum arboreum **Sourwood**



Height: 20' Spread: 15' Shape: Pyramidal to rounded Foliage: Dark green, glossy Fall Color: Orange, scarlet Flower: Creamy white, bell shaped

A slow-growing, small tree whose light green, bronze tinted foliage turns brilliant orange and scarlet tones in the fall. Creamy white, bell shaped clusters up to 10 inches in length smother its branches in mid-summer.

Zone: 5 Height: 20'



Parrotia



### Parrotia

#### Parrotia persica 'Chrishaven1' PP 28584 Golden BellTower™ Parrotia



Zone: 4 Height: 30' Spread: 12' Shape: Columnar to upright oval Foliage: Green, textured Fall Color: Golden to apricot orange

A slender tower of elegantly textured green leaves turns golden yellow in autumn. This unusually narrow cultivar has a storm-resistant branch structure. Adaptability to varied soils and excellent disease resistance make it a top pick for urban settings where a low maintenance, columnar tree is needed.

5

Parrotia



#### Parrotia persica 'JLColumnar' PP 24951 Persian Spire<sup>™</sup> Parrotia



Zone: 5 Height: 25' Spread: 10' Shape: Columnar to upright oval Foliage: Green, fine textured Fall Color: Orange, red, yellow and burgundy Flower: Showy red stamens

Unique for both its form and fine texture, this strongly upright tree is a colorful choice for hedges, screens and formal street plantings. Refined foliage emerges purple and matures to green with purple tinted margins that linger into the summer months. Fall color is bright and long lasting.

#### Parrotia persica 'Inge's Ruby Vase' Ruby Vase<sup>®</sup> Parrotia



Zone: 5 Height: 28' Spread: 16' Shape: Upright narrow vase Foliage: Dark green; red new growth Fall Color: Orange-red Flower: Showy red stamens

Upright and narrower than the species, this cultivar features dark green summer foliage that begins the season with red tipped new growth and finishes with bright fall color. The upright form makes it suitable for street use.

#### Parrotia persica 'Vanessa' Vanessa Parrotia



Height: 28' Spread: 14' Shape: Upright, tight vase Foliage: Green, textured Fall Color: Orange-red Flower: Showy red stamens

**Zone:** 5

Tighter, with greater density, and more upright than the species, Vanessa is a better choice for smaller landscapes or for use near streets. Fall color varies from orange to red and is always impressive.

### Phellodendron

Cork Tree

#### Phellodendron amurense 'Longenecker' Eye Stopper™ Cork Tree



Zone: 4 Height: 40' Spread: 35' Shape: Upright, then spreading, rounded crown Foliage: Medium green Fall Color: Bright yellow Fruit: Generally seedless

This cultivar has the clearest, bright yellow foliage of the cork trees introduced to date. It was selected from trees at the University of Wisconsin Longenecker Gardens.



Picea Spruce

#### Picea pungens 'Baby Blue Eyes' Baby Blue Eyes Spruce



Height: 25' Spread: 15' Shape: Broadly pyramidal Foliage: Blue-green needles

**Zone:** 4

Rich, silvery blue color distinguishes this slow growing, semi-dwarf selection of the Rocky Mountain native spruce. A good central leader and upright pyramidal form are among reasons to choose this densely branched symmetrical conifer for small space gardens.

#### Picea glauca var. densata Black Hills Spruce



Zone: 3 Height: 30' Spread: 20' Shape: Broadly pyramidal Foliage: Bluish-green needles

www.jfschmidt.com

Needle-like foliage emerges bright green and matures to bluish green. This compact, slow growing conifer is a naturally occurring variety of white spruce native to South Dakota. Well suited for life on the Great Plains, it is a good fit for residential landscapes and windbreaks. Tolerant of dry soils and road salts.

Picea omorika 'Bruns' Bruns Serbian Spruce



Zone: 4 Height: 30' Spread: 15' Shape: Narrowly pyramidal Foliage: Glossy blue green, silvery undersides

Symmetrical branches of glossy blue green needles tip upward at the ends to form a narrow pyramid. Widely adaptable to heat, cold, humidity and a broad range of pH soils. Popular and widely planted since introduced by H. Bruns Nursery of Germany in 1955.



#### Picea abies 'Cupressina' Columnar Norway Spruce



Zone: 4 Height: 30' Spread: 10' Shape: Columnar Foliage: Dark bluishgreen

Tightly columnar form and deep bluish green foliage present a landscape exclamation point when planted solo. Trees planted in groups or hedges create handsome visual screens. Stiff, short needles and strong branch attachment make it a durable choice for snow country.

#### Picea pungens 'Fat Albert' Fat Albert Blue Spruce



Zone: 2 Height: 15' Spread: 12' Shape: More broadly pyramidal Foliage: Silvery-blue needles

A slow growing selection that can almost be as wide at the base as it is tall. It forms a tight growing pyramid with little layering.

#### Picea pungens 'Globosa' Globe Blue Spruce



Zone: 2 Height: 3' Spread: 4' Shape: Rounded, compact Foliage: Silvery blue needles

This dwarf form has good blue needle color and forms a compact, flat topped ball.

#### Picea pungens 'Iseli Fastigiate' Iseli Fastigiate Spruce



Zone: 3 Height: 25' Spread: 10' Shape: Tightly columnar Foliage: Blue green needles

Stiffly upright branches form a column of steely blue foliage. Selected in 1965 by Iseli Nursery, this unique and moderately fast-growing selection of Colorado Blue Spruce is a good fit for tight spaces and is effective as a landscape exclamation mark.

#### Picea mariana 'Wellspire' Wellspire Black Spruce



Distinctive dark green foliage and tightly columnar form distinguish this deer-resistant conifer that is remarkably tough and cold hardy. Growing to a height and spread of about  $10' \times 3'$  at about 10 years, it maintains its fastigiate form at maturity.



Pinus Pine

#### Pinus nigra Austrian Pine



Zone: 4 Height: 55' Spread: 30' Shape: Broadly pyramidal to rounded Foliage: Dark green needles, in pairs

Cold hardy, tough, and adaptable, it becomes a tree of strong character.

Pinus heldreichii (syn. P. leucodermis) Bosnian Pine



Zone: 5 Height: 50' Spread: 20' Shape: Broadly pyramidal Foliage: Dark green needles Fruit: Cones, bluish purple maturing to brown, 2-3"

Reliable, highly adaptable landscape conifer with high tolerance of heat, cold, drought and poor soils including those high in salt. Columnar in youth, its symmetrical, narrow form and dense foliage make it a good accent plant or visual screen when planted in rows or groups. A native of higher elevations of the Balkan Peninsula and southern Italy, it is also known as *P. leucodermis*.

### **Pistacia -** Pistache

#### Pinus strobus 'Fastigiata' Fastigiate White Pine



Zone: 4 Height: 30' Spread: 10' Shape: Columnar, fastigiate Foliage: Bluish green needles

This narrow, upright tree has long blue-green needles which gives it a softer appearance than other upright conifers.

#### Pinus flexilis 'Vanderwolf's Pyramid' Vanderwolf's Pyramid Pine



Zone: 5 Height: 40' Spread: 20' Shape: Pyramidal Foliage: Blue-green needles

A vigorous, upright selection of Limber Pine with especially nice blue-green foliage. Native from the Sierra Nevadas through the Rocky Mountains.

Pistacia

### Pistache

#### Pistacia chinensis Chinese Pistache



Zone: 6 Height: 30' Spread: 30' Shape: Rounded Foliage: Dark green, pinnately compound Fall Color: Orange-red

An excellent tree for hot dry climates, it thrives from California through Oklahoma. It provides bright red fall color in climates where autumn tints are rare.







### Platanus

#### Planetree

#### Platanus × acerifolia 'Bloodgood' Bloodgood London Planetree



Zone: 5 Height: 50' Spread: 40' Shape: Broadly pyramidal Foliage: Large, maple like, medium to dark green Fall Color: Yellow

DISEASE RESISTANCE: Anthracnose

Reputed to be more resistant to anthracnose than the species. The naturally shedding bark creates a dappled brown and cream pattern that accentuates sunlight filtering through the foliage. This is a popular tree for malls, parks and shopping centers.

### Platanus × acerifolia 'Morton Circle' Exclamation!® Planetree



Zone: 5 Height: 55' Spread: 35' Shape: Upright pyramidal Foliage: Medium green Fall Color: Yellow

#### DISEASE RESISTANCE:

Anthracnose and powdery mildew

Near-perfect symmetry commands attention in any landscape. A carefree performer on city streets, it is urban tolerant, anthracnose resistant, and moderately resistant to powdery mildew. A moderate growth rate, light-fruiting habit and resistance to frost cracking are additional reasons to plant this adaptable shade tree.

#### Platanus x acerifolia 'Morton Naper' Monumental<sup>™</sup> Planetree



Zone: 4 Height: 60' Spread: 45' Shape: Broadly pyramidal Foliage: Green Fall Color: Yellow

#### DISEASE RESISTANCE: Anthracnose

Upright branches radiate at 45-60° angles from a strong and straight central stem and leader, forming a dense, symmetrical broadly pyramidal canopy. Clean, green, disease resistant foliage turns yellow before falling in autumn to reveal the bright, light grey bark of branches and trunk.



#### Populus tremuloides Quaking Aspen



Zone: 3 Height: 30' Spread: 15' Shape: Narrow oval to pyramidal Foliage: Green, trembles in breeze Fall Color: Yellow

Native throughout much of the West, the beauty of aspen groves is well known. The sight of autumn's golden leaves trembling over silvery gray bark is not forgotten.



#### Populus tremuloides 'JFS-Column' Mountain Sentinel® Aspen



Zone: 3 Height: 35' Spread: 8' Shape: Narrow, fastigiate Foliage: Green, trembles in breeze Fall Color: Yellow Fruit: Seedless

Our native aspen is now available in fastigiate form! Extremely narrow and upright, with ascending branches, it has the same silvery-gray bark, fluttering leaves, and golden yellow fall color, but in a much narrower form.

#### Populus tremuloides 'NE-Arb' Prairie Gold<sup>®</sup> Aspen



Zone: 4 Height: 40' Spread: 15' Shape: Narrow oval to pyramidal Foliage: Light green, trembling in breeze Fall Color: Golden yellow

Adapted to the heat, drought and humidity of the Midwestern prairie, this Nebraska native brings lowland adaptability and disease tolerance to a high elevation favorite. Introduced by Schmidt in cooperation with the Nebraska Statewide Arboretum, Prairie Gold<sup>®</sup> greatly expands the planting range of this mountain species.

Populus tremula 'Erecta' Swedish Columnar Aspen



Zone: 2 Height: 40' Spread: 10' Shape: Very narrow, fastigiate Foliage: Green, trembles in breeze Fruit: Seedless

Rustling leaves make the same pleasant sound as Quaking Aspen. This upright and very narrow tree is well adapted to cold climates. Seedless, it is a good substitute for Lombardy Poplar.

### **Prunus -** Japanese Cherry

### Populus

#### Cottonwood

#### Populus sargentii 'Jeronimus' Jeronimus Cottonwood

Zone: 3 Height: 60' Spread: 40' Shape: Upright oval, rounded with age Foliage: Light green Fall Color: Yellow Fruit: Seedless (cottonless)

Selected for its more uniform upright growth and branch habit, this male form of Sargent Cottonwood grows well in the western plains states. Distinctly upright in its younger years, trees can become more rounded with age. Triangle-shaped light green leaves are rather glossy and remain clean through the growing season. Older trees develop a thick rough bark.

### Populus

Poplar

#### Populus deltoides 'Siouxland' Siouxland Poplar



Zone: 2 Height: 75' Spread: 35' Shape: Oval Foliage: Medium green Fall Color: Yellow Fruit: Seedless (cottonless)

A very fast growing "Cottonless Cottonwood" with resistance to leaf rust.



### Prunus Chokecherry

#### Prunus virginiana 'Canada Red' Canada Red Improved Chokecherry



Zone: 2 Height: 25' Spread: 20' Shape: Upright spreading, rounded Foliage: Leaves emerge green, turn purple in summer Fall Color: Red to reddish purple Flower: Small white, in long clusters

This very cold hardy tree is remarkable for its leaves that emerge green and mature to dark purple as the weather warms. Foliage color intensifies to reddish purple in autumn.



Prunus

#### Japanese Cherry

#### Prunus × yedoensis 'Akebono' Akebono Cherry



Zone: 5 Height: 25' Spread: 25' Shape: Upright, spreading Foliage: Medium green Fall Color: Yellow Flower: Delicate pink

Similar to Yoshino in form, but said to mature slightly smaller. Blooms have a stronger tint of pink.

Prunus serrulata 'Amanogawa' **Amanogawa Cherry** 



Zone: 5 Height: 20' Spread: 6' Shape: Columnar, fastigiate branching Foliage: Green Fall Color: Bronze Flower: Pale pink, semi-double

Very narrow and tightly upright in growth, it forms a column of light pink flowers in the spring.

#### Prunus subhirtella 'Autumnalis Rosea' Autumn Flowering Cherry



Zone: 5 Height: 25' Spread: 22' Shape: Upright spreading with slender branches Foliage: Medium green Fall Color: Yellow to bronze Flower: Semi-double to double, light pink

Very unusual for its bloom. Flowers are produced in November and again in the spring. In mild climates it will bloom sporadically all winter. It has a delicate branch pattern which adds to its winter interest.

#### Prunus sargentii 'Columnaris' Columnar Sargent Cherry



Zone: 4 Height: 35' Spread: 15' Shape: Upright, columnar to narrow vase Foliage: Dark green Fall Color: Orange to orange-red Flower: Single pink, in clusters

A narrow, upright form makes this Sargent Cherry suitable for use as a street tree. It is admired for its beautiful fall color and handsome mahogany colored bark.

#### Prunus subhirtella 'Pendula Plena Rosea' Double Weeping Cherry syn.Yae-Shidare-Higan



Zone: 5 Height: 25' Spread: 25' Shape: Weeping Foliage: Dark green Fall Color: Yellow to bronze Flower: Double, pink

Gracefully weeping branches are laden with small, double-petaled pink flowers in spring, creating an impressive floral display. A classic cultivar that has withstood the test of time.









Prunus 'JFS-KW14' PP 28248



#### Prunus 'JFS-KW14' PP 28248 First Blush<sup>®</sup> Cherry



Zone: 5 Height: 25' Spread: 12' Shape: Upright narrow oval Foliage: Dark green Fall Color: Orange to orange red Flower: Pink, double, fragrant

Double pink flowers smother the branches of this very narrow, upright cherry in early spring. The breathtaking floral display gives way to dark green, finely textured, disease resistant leaves that turn bright orange to orange red in autumn.

#### Prunus serrulata 'Kwanzan' Kwanzan Cherry



Zone: 5 Height: 30' Spread: 20' Shape: Broad vase Foliage: Dark green Fall Color: Bronze-orange to orange-red Flower: Double, rosy pink in clusters Fruit: Seedless

Kwanzan's large double pink flowers make it the showiest cherry in spring and account for its great popularity.

#### Prunus 'Okame' Okame Cherry



Zone: 5 Height: 25' Spread: 20' Shape: Upright branching, oval Foliage: Dark green, fine textured Fall Color: Yelloworange to orange-red Flower: Small, clear pink, profuse

Effective floral display of this very early blooming cultivar is long lasting due to brightly colored flower bud and calyx. A hybrid of *P. incisa* x *P. campanulata*, Okame originated in England and was introduced to the U.S. by Morris Arboretum.

#### Prunus 'NCPH1' PP 27579 Pink Cascade<sup>®</sup> Cherry



Height: 12' Spread: 12' Shape: Weeping Foliage: Dark green, fine textured Fall Color: Orange Flower: Bright pink, prolific

Zone: 5

Bright pink flowers smother the branches of this gracefully weeping cherry, setting it apart from the popular white-blooming Snow Fountains® Cherry which it resembles in summer appearance. Developed at North Carolina State University, this small and delicate garden tree is easy to grow.

#### Prunus sargentii 'JFS-KW58' Pink Flair<sup>®</sup> Cherry



Zone: 3b Height: 25' Spread: 15' Shape: Upright narrow vase Foliage: Dark green Fall Color: Orange-red Flower: Single pink, in clusters

Narrow and upright in form, but compact in height, this flowering cherry is well suited for urban landscapes. It avoids frost damage by flowering a week or two later than is typical of the species and has proven to be the hardiest of the flowering cherries. Fall color is consistently bright orange-red, and its handsome bark and upright symmetrical provide winter appeal.

Prunus sargentii 'JFS KW21PS' PP 32619 Pink Myst<sup>®</sup> Cherry



Zone: 4 Height: 30' Spread: 15' Shape: Upright to upright oval Foliage: Dark green Fall Color: Orange to orange red Flower: Deep pink

Bright pink flowers, darker in color than other Sargent Cherry blooms, smother the branches of this unique cultivar. Rich, dark green summer foliage turns to lovely shades of orange and red in autumn. It is also narrower and more upright in form than is typical of the species.

#### Prunus serrulata 'Royal Burgundy' Royal Burgundy Cherry



Zone: 5 Height: 20' Spread: 15' Shape: Broad vase Foliage: Deep purple Fall Color: Bronzepurple Flower: Double, magenta-pink Fruit: Seedless

Royal Burgundy is a purple foliaged form of Kwanzan. Slightly slower growing, its flowers are a darker tint, and its deep purple foliage is unique among cherries.

Prunus sargentii Sargent Cherry



Zone: 4 Height: 30' Spread: 30' Shape: Upright, spreading branches, rounded crown Foliage: Dark green Fall Color: Bronze orange to orange-red Flower: Single pink, in clusters

Sargent displays some of the best fall color to be found among the Cherries. It has nice mahogany colored bark and is hardier than other Japanese Cherries.

56

1.800.825.8202

### **Prunus –** Purple Leaf Plum



Prunus × 'Snofozam' Snow Fountains<sup>®</sup> Cherry



Zone: 5 Height: 12' Spread: 12' Shape: Weeping Foliage: Small, dark green leaves Fall Color: Golden to orange Flower: White

Fragrant white blooms tumble from the refined branches of this gracefully weeping ornamental cherry in early spring. Summer brings a cascade of petite dark green leaves that turn golden orange in autumn for a long-lasting show of fall color.

#### Prunus × yedoensis Yoshino Cherry



Zone: 5 Height: 30' Spread: 30' Shape: Upright spreading branches, rounded crown Foliage: Bright green, glossy Fall Color: Yellow Flower: Single light pink to white, fragrant

Yoshino is the tree which has been made famous by its blossom display at the Tidal Basin in Washington, D.C.



#### Prunus × cistena 'Schmidtcis' Big Cis® Plum



Zone: 4 Height: 14' Spread: 12' Shape: Rounded, dense Foliage: Purple Flower: Light pink, very fragrant

A sport of Cistena, Big Cis<sup>®</sup> Plum grows quickly to a heavy-trunked, sturdy tree that is intermediate in size between Cistena and Newport. Cistena-like flowers are followed by dark purple foliage that keeps its fresh, clean appearance later in the season.

#### Prunus cerasifera 'Krauter Vesuvius' Krauter Vesuvius Plum



Similar to Thundercloud in appearance, but a little smaller and more upright. Due to its tolerance of hot dry weather, it seems to be the best flowering plum for southern climates.

Zone: 5 Height: 20' Spread: 15' Shape: Upright Foliage: Dark purple Flower: Light pink



#### Prunus 'Frankthrees' Mt. St. Helens<sup>®</sup> Plum



Height: 20' Spread: 20' Shape: Upright spreading, rounded Foliage: Purple Flower: Light pink

Zone: 4

Dark purple leaves emerge earlier in the spring and hold their rich color longer into summer than other cultivars. A sport of Newport, this cultivar grows faster and develops a dense head supported by a stronger, sturdier trunk. This very hardy ornamental plum performs well where climates are extreme.

#### Prunus 'Newport' Newport Plum



Zone: 3 Height: 20' Spread: 20' Shape: Upright spreading, broadly oval to rounded Foliage: Purple-red Fall Color: Reddish Flower: Light pink

This hardy and widely used plum is quite adaptable and performs well in tough climates.

# Pink Flair Flowering Cherry

Prunus sargentii 'JFS-KW58'









*Pyrus × triploida* 'NCPX2' PP 30788



Chastity<sup>®</sup> Pear delivers the multi-season beauty of flowering pears without its negative characteristics. Poised to replace other flowering pears in areas where invasiveness is a concern, this fireblight-resistant cultivar is a highly infertile, triploid hybrid, specifically bred to prevent weediness. Developed by Dr. Tom Ranney of North Carolina State University.





#### Prunus cerasifera 'Thundercloud' Thundercloud Plum



**Zone:** 5 Height: 20' Spread: 20' Shape: Upright spreading, dense, rounded Foliage: Dark purple Flower: Light pink

One of the best purple-leaved plums, it retains deep purple foliage color through the growing season. It has maintained steady popularity since its introduction in 1937.



Thundercloud Plum



**Flowering Pear** 

#### Pyrus calleryana 'Aristocrat' Aristocrat<sup>®</sup> Pear



Zone: 4b Height: 40' Spread: 28' Shape: Pyramidal, with open, spreading branches Foliage: Narrow, dark green, glossy Fall Color: Deep red Flower: White

An outstanding pear selection with an unusual growth habit, Aristocrat® has an open, informal appearance. Branch angles are wider than other pears, thus more resistant to storm damage. Highly rated by the Ohio Shade Tree Evaluation Project.

#### Pyrus calleryana 'Autumn Blaze' Autumn Blaze Pear



Zone: 4 Height: 30' Spread: 25' Shape: Rounded Foliage: Glossy green Fall Color: Bright red Flower: White

Rounded shape with spreading branches. Foliage emerges with a red tint and matures to glossy green. Best cold hardiness of the Callery pears, and the earliest to develop fall color.

#### Pyrus calleryana 'Glen's Form' Chanticleer<sup>®</sup> Pear



**Zone:** 4 Height: 40' Spread: 15' Shape: Upright, narrowly pyramidal Foliage: Green, glossy Fall Color: Reddish Flower: White, in clusters

#### DISEASE RESISTANCE: Fireblight

A densely growing, narrow selection suitable for street plantings. It is resistant to fireblight and much less susceptible to wind breakage than Bradford.

**Zone:** 5 Height: 35' Spread: 10' Shape: Fastigiate, tightly columnar Foliage: Glossy dark green Flower: Pink buds produce fruit

#### DISEASE RESISTANCE: Fireblight

The tightest and most columnar pear we have seen, it stays narrow as it matures. Unique foliage leafs out purple, and matures to glossy dark green in the heat of summer. Developed at North Carolina State University, this fireblight resistant pear is a great addition as a landscape exclamation point or for use on narrow streets.

#### www.jfschmidt.com

58

### Pyrus

Hybrid Flowering Pear Pyrus × triploida 'NCPX2' PP 30788

### Chastity<sup>®</sup> Pear



**Zone:** 5 Height: 35' Spread: 25 Shape: Broadly pyramidal Foliage: Dark green, alossy Fall Color: Orange to red, purple highlights Flower: White, profuse Fruit: Sparse

#### DISEASE RESISTANCE: Fireblight

Prolific white blooms of spring are followed by glossy green foliage that presents a bright medley of fall colors. Poised to replace other flowering pears in areas where invasiveness is a concern, this highly infertile, triploid hybrid was bred to prevent weediness.

#### Pvrus 'NCPX1' PP 26539 Javelin<sup>®</sup> Pear



Fall Color: Orange-red open to white flowers Fruit: May occasionally

#### Pyrus calleryana 'Jaczam' Jack<sup>®</sup> Pear



Zone: 4 Height: 16' Spread: 10' Shape: Compact upright oval Foliage: Dark green Fall Color: Yellow Flower: White

Tight and upright in form, this cultivar is ideal for narrow streets and planting beneath utility wires. Its dwarf growth rate results in a cultivar that matures at less than half the size typical of the species. Its density and upright habit give the unusual combination of a formal appearance in a low maintenance tree.

### Quercus

**Zone:** 5

0ak

#### Quercus acutissima Sawtooth Oak



Height: 40' Spread: 40' Shape: Rounded Foliage: Dark green, glossy Fall Color: Yellow

A fast growing, spreading oak well adapted to the summer heat of the South. It has outstanding summer foliage. Very glossy and sharply serrated leaves give it a clean, crisp appearance.

#### Quercus alba White Oak



Zone: 4 Height: 45' Spread: 45' Shape: Rounded Foliage: Medium green, fine textured Fall Color: Red to reddish purple

Among the mightiest of the noble oaks, White Oak is claimed by several states as their official tree. Reputed to be slow-growing, well-grown nursery plants grow fairly quickly once established. Unlike English Oak, this native of Eastern North America is resistant to powdery mildew.



#### Quercus bicolor Swamp White Oak



Height: 45' Spread: 45' Shape: Rounded, open Foliage: Green with wavy margins Fall Color: Yellow brown to reddish

Zone: 4

A beautiful native tree with lustrous, heavy textured green leaves with wavy margins. Adaptability to wet, poorly drained soils and tolerance of drought make it a fine choice for urban settings.



#### Quercus bicolor 'JFS-KW12' PP 23632 American Dream<sup>®</sup> Oak



Height: 50' Spread: 40' Shape: Broadly pyramidal Foliage: Bright green, glossy Fall Color: Yellow

**Zone:** 4

Vigorous growing and broadly pyramidal with excellent density, this tree shines with bright green, glossy foliage. Selected for strong resistance to anthracnose and powdery mildew, the broad, handsome leaves turn yellow and then tawny brown as they hold into early winter.

#### Quercus bicolor 'Bonnie and Mike' Beacon<sup>®</sup> Oak



Zone: 4 Height: 40' Spread: 15' Shape: Narrowly columnar Foliage: Green Fall Color: Yellow

Tightly columnar and urban adaptable, this oak was discovered by famed plantsman/author Dr. Michael Dirr and his wife, Bonnie. Stout upright branching structure and clean, dense green foliage make this an ideal street tree that adds a strong visual statement to any landscape. Bright yellow fall color deepens to tawny brown.



59









#### Quercus - Oak



60





Tightly columnar in form, this rugged, adaptable, cold hardy tree sports dark green, heat and drought tolerant leaves that turn rusty to dark red in autumn.

#### Quercus × bimundorum 'Crimschmidt' Crimson Spire™ Oak



Zone: 4 Height: 45' Spread: 15' Shape: Columnar, tightly fastigiate Foliage: Dark green to bluish-green Fall Color: Rusty red

This columnar selection originated as a hybrid of *Q. robur* and *Q. alba*. White oak parentage provides dark green, mildew resistant foliage and reddish fall color. Fastigiate growth habit is inherited from the English oak side.



#### Quercus × bimundorum 'Midwest' Prairie Stature<sup>™</sup> Oak



Zone: 3 Height: 50' Spread: 40' Shape: Broadly pyramidal Foliage: Dark green Fall Color: Yelloworange to red

A hybrid of English and white oak, this tree has proven very cold hardy in North Dakota State University trials. Dark green foliage shows mildew resistance and can change to a good red coloration in autumn.

#### Quercus × bimundorum 'JFS-KW2QX' PP 24442 Skinny Genes<sup>®</sup> Oak



Zone: 4 Height: 45' Spread: 10' Shape: Columnar, tightly fastigiate Foliage: Dark green, glossy, mildew resistant Fall Color: Yellow to tawny yellow

The narrowest yet of the English x White Oak hybrids, this slender cultivar sports glossy, dark green leaves that present a clean, fresh summer appearance. Fine textured foliage is mildew resistant and turns yellow in autumn. Selected from second-generation seedlings of a sister of the widely planted Crimson Spire<sup>™</sup> Oak.

#### Quercus × bimundorum 'JFS-KW1QX' Streetspire<sup>®</sup> Oak



Zone: 4 Height: 45' Spread: 14' Shape: Narrow, columnar Foliage: Dark green Fall Color: Rusty red

Dark green leaves of this narrowly columnar tree are mildew resistant. Turning red in autumn, they fall to reveal stiffly upright branches. Similar to Crimson Spire™, but does not hold brown foliage through the winter. Wide crotch angles and short upsweeping branches create a storm resistant structure.





### Quercus buckleyi **Texas Red Oak**



Zone: 6 Height: 40' Spread: 40' Shape: Broadly rounded Foliage: Green, glossy Fall Color: Orange-red to red

Native to Texas and Oklahoma, this is a moderate sized, drought tolerant oak. It spreads to form a broadly rounded crown and colors brightly in the fall.

### Quercus coccinea Scarlet Oak



Height: 50' Spread: 40' Shape: Upright spreading, open, broadly oval Foliage: Dark green, glossy Fall Color: Scarlet

Zone: 4

Dark green, glossy leaves of summer are distinctive for their sharply pointed lobes. Scarlet Oak generally displays the finest fall color of all the oaks, delivering brilliant, deep tones of red to scarlet purple in late autumn.

#### Quercus ellipsoidalis Northern Pin Oak



Zone: 4 Height: 55' Spread: 40' Shape: Broadly pyramidal to oval Foliage: Green Fall Color: Red

Closely related to Pin Oak, this tree shares many positive attributes and is also more tolerant of dry and alkaline soils. Also known as Hill's Oak, its native range is the northern midwest, but it can be used more widely.

#### Quercus frainetto 'Schmidt' Forest Green<sup>®</sup> Oak



Height: 50' Spread: 30' Shape: Upright, oval Foliage: Deep green, very glossy, rounded lobes Fall Color: Yellow to brown

**Zone:** 5b

This is an upright growing, vigorous oak with a strong central leader. Drought resistant and adaptable, its glossy deep green foliage and strong symmetrical shape make it one of the best looking trees of summer. Deeply lobed leaves fall cleanly in autumn.

#### Quercus gambelii Gambel Oak



Native to the dry, mountainous interior West, from Utah and Colorado to the Mexican border. Drought tolerant and hardy, it is an ideal tree for low main-

tenance landscapes in its native range.

**Zone:** 5

Height: 25'

Spread: 25'

Shape: Rounded

Fall Color: Yellow

Foliage: Dark green

orange to orange red

#### Quercus imbricaria Shingle Oak



Zone: 5 Height: 50' Spread: 40' Shape: Broadly oval Foliage: Dark green, glossy Fall Color: Yellow to rusty red

Native to the midwest and well adapted to conditions there, including calcareous soils. A large shade tree with beautiful summer foliage.

#### Quercus × macdanielii 'Clemons' Heritage<sup>®</sup> Oak



Zone: 4 Height: 50' Spread: 40' Shape: Broadly pyramidal to oval Foliage: Dark green, glossy Fall Color: Yellow

Handsome dark green foliage, a broadly pyramidal form, and mildew resistance combine to make this an excellent street tree. An English  $\times$ bur oak hybrid, it has better cold tolerance than English oak.

# Streetspire Oak

Quercus - Oak

Quercus robur × alba 'JFS-KW1QX'



Dark green, heat and mildew-resistant leaves emerge with a red flush that hints at red fall color to come. Leaves drop cleanly in autumn to reveal stiffly upright, storm-resistant branches. Quercus - Oak



62





#### Urban Pinnacle<sup>®</sup> Oak acorns (above) are much smaller than typical Bur Oak acorns (below)



A perfect fit for landscapes that call for a large shade tree with a slender profile, this narrow selection of our native Bur Oak sports glossy, dark green, disease resistant foliage.

#### Quercus macrocarpa Bur Oak



Height: 55' Spread: 45' Shape: Broadly oval, irregular and open Foliage: Dark green Fall Color: Yellow to yellow brown

**Zone:** 3

A large and impressive native tree, with a thick trunk and stout branches. Does well in alkaline soils.

#### Quercus macrocarpa 'JFS-KW14' Cobblestone<sup>®</sup> Oak



Zone: 3 Height: 55' Spread: 45' Shape: Broadly oval Foliage: Dark green Fall Color: Yellow

A traditional form of bur oak with the corkiest bark we have observed in the nursery. With bur oak's rugged form and unusually corky branches, it has an "ancient tree" look at a young age. The handsome foliage is dark green and the tree was selected for mildew and anthracnose resistance.



#### Quercus macrocarpa 'JFS-KW3' PP 22815 Urban Pinnacle<sup>®</sup> Oak



Height: 55' Spread: 25' Shape: Narrow, pyramidal to oval Foliage: Dark green, glossy Fall Color: Yellow Fruit: Unusually small acorn

**Zone:** 3

Narrow and upright with a strong central leader, this cultivar also features attractive glossy foliage and resistance to both mildew and anthracnose. Acorns of about  $\frac{1}{2}$ " diameter are extremely small for a bur oak, making it a more suitable tree for landscape and street tree use.

#### Quercus montana (formerly Q. prinus) Chestnut Oak



Zone: 4 Height: 50' Spread: 40' Shape: Pyramidal in youth, irregularly rounded at maturity Foliage: Green with wavy margins Fall Color: Orange yellow to reddish brown

Tolerance of dry, rocky alkaline soils and periods of drought recommend this adaptable native of Eastern U.S. forests for urban use. Freedom from major pests and diseases, a relatively fast growth rate and reported tolerance of urban salts are additional attributes.

#### Quercus muehlenbergii Chinkapin Oak



Zone: 5 Height: 45' Spread: 45' Shape: Rounded, open Foliage: Lustrous dark green Fall Color: Yellow to vellow brown

This durable and adaptable native oak has a reputation for performing well in dry, alkaline soils. A native of the Northeast and Midwest, it is a natural choice for harsh, windswept locations. Its narrow, glossy green leaves turn yellow in autumn.

#### Quercus nuttallii Nuttall Oak



Zone: 6 Height: 50' Spread: 45' Shape: Broadly pyramidal to broadly oval Foliage: Dark green Fall Color: Yelloworange to rusty red

A proven performer in Southern cities, this native of the lower Mississippi bottomlands and central Gulf Coast is well adapted to tough urban growing conditions including heavy wet soils and long hot summers. Similar to *Q. shumardii* in appearance, but drops its autumn leaves cleanly.

Quercus palustris **Pin Oak** 



Zone: 4 Height: 55' Spread: 40' Shape: Pyramidal with slender horizontal branches Foliage: Green Fall Color: Rusty orange to red

Pin Oak is a tree with a very distinctive growth habit. The strong central leader is maintained to the top. Branches are long, slender and horizontally layered, giving this large tree an elegant appearance.



**Zone:** 6

Height: 50'

Spread: 35'

when young,

Shape: Pyramidal

becoming rounded Foliage: Medium green, narrow Fall Color: Yellow to vellow-brown

#### Quercus robur × bicolor 'Long' Regal Prince<sup>®</sup> Oak



Zone: 4 Height: 45' Spread: 18' Shape: Columnar to narrow oval Foliage: Glossy, bright green Fall Color: Yellow

Mildew-resistant summer foliage is glossy, clean and bright green. This adaptable hybrid of English and Swamp White Oak is notable for excellent columnar form.

#### Quercus rubra **Red Oak**



Zone: 4 Height: 50' Spread: 45' Shape: Rounded Foliage: Dark green Fall Color: Red

Red Oak is a large, fast growing, broad headed tree. The large leaves turn from a rich green to deep red in the fall.

#### Quercus shumardii Shumard Oak



Zone: 5 Height: 50' Spread: 40' Shape: Upright spreading, open, broadly oval Foliage: Dark green Fall Color: Red

An excellent substitute for Scarlet Oak in the central and S.E. USA. It thrives in moist, acid bottom land soils where poor drainage creates problems for other trees.

#### Quercus velutina Northern Black Oak



Zone: 4 Height: 50' Spread: 45' Shape: Oval to rounded Foliage: Dark green Fall Color: Rusty red

Very similar in appearance to Red Oak, differences include its ability to thrive on poor and varied soils. Naturally occurring trees are often found on poor sandy sites or heavy clay hillsides. Deeply furrowed bark on mature trees is nearly black.



### Quercus robur English Oak

fibrous root system.

Quercus phellos

Willow Oak



Zone: 5 Height: 50' Spread: 40' Shape: Broad, rounded, open headed crown Foliage: Deep green Fall Color: Yellowbrown

A big sturdy tree, its size gives it character. It is quite adaptable to various soils and climates.

A fast growing oak with unique, slender, "willow-

shade tree. Widely used as a street and boulevard tree, as well as a shade tree for parks, golf courses, commercial sites and open spaces. Fast growing and one of the easier oaks to transplant due to its

like" leaves. This is a popular and commonly planted

#### Quercus robur × bicolor 'Nadler' PP 17604 Kindred Spirit<sup>®</sup> Oak



Zone: 4 Height: 30' Spread: 6' Shape: Tightly columnar Foliage: Medium green Fall Color: Yellow to yellow-brown

Among the tightest of columnar trees, its growth habit, mildew and drought resistance, and tolerance of urban soils make this hybrid of English and swamp white oak ideal for narrow city streets. A sister seedling of Regal Prince<sup>®</sup>, the foliage is less glossy but the form is significantly tighter.

## Robinia

#### Robinia pseudoacacia 'Purple Robe' Purple Robe Locust



Zone: 3 Height: 50' Spread: 32' Shape: Ascending, outward arching branches, open Foliage: Purpletinted new growth ages to bronze-green Fall Color: Yellow Flower: Dark purple Fruit: Seedless pods

A tough, fast growing tree which is well adapted to hot, dry climates. It is best suited for areas of the West where it provides welcome shade during hot dry summers. Spines are much reduced compared to species.



#### Salix

Willow

#### Salix alba 'Tristis' Golden Weeping Willow



Zone: 3 Height: 40' Spread: 60' Shape: Broadly weeping Foliage: Light green Fall Color: Yellow

Golden winter stems and graceful habit belie the tough character of this fast growing, tough and widely adapted weeping tree.

### Salix 'Prairie Cascade' Prairie Cascade Weeping Willow



Zone: 3 Height: 30' Spread: 40' Shape: Weeping Foliage: Dark green, very glossy

Selected by the Morden Research station in Manitoba for cold hardiness. It combines a weeping habit, golden stems, and dark green glossy foliage. It has a more upright form in warm climates.

### Sassafras

Zone: 4

#### Sassafras albidum Sassafras



Height: 40' Spread: 30' Shape: Irregular pyramid Foliage: Green, lobed Fall Color: Bright red

This widespread eastern U.S. native is ideal for naturalistic landscaping. Both tree form and leaf shape are variable and interesting. A thicket of Sassafras brings a "woodsy" feel to the landscape.

### Sciadopitys

#### Japanese Umbrella Pine

## Sciadopitys verticillata 'Wintergreen' Wintergreen Umbrella Pine



Zone: 5 Height: 25' Spread: 12' Shape: Pyramidal maturing to broadly upright Foliage: Dark green needles, conifer

Glossy foliage retains its rich, deep green color through the winter rather than yellowing as is typical of seedling-sourced trees. Tightly whorled bundles of needles resembling the spokes of an umbrella inspired the name of this unique evergreen conifer. Prefers acid soils but is tolerant of clay soils, wet sites and road salts.

Sorbus

#### Mountain Ash

#### Sorbus aucuparia European Mountain Ash



Zone: 2 Height: 35' Spread: 24' Shape: Upright and oval, becoming rounded Foliage: Dark green Fall Color: Rusty orange Flower: White, in clusters Fruit: Orange-red

A useful small tree that is particularly beautiful in autumn because of the abundant bright fruit. Schmidt trees are budded with a superior clone, ensuring uniformity of habit.



#### Sorbus aucuparia 'Michred' Cardinal Royal<sup>®</sup> Mountain Ash



Zone: 2 Height: 35' Spread: 20' Shape: Upright narrow oval Foliage: Green Fall Color: Rust Flower: White, in clusters Fruit: Bright red

A vigorous tree with upright branches and a very symmetrical and tidy habit. This tree was selected for its clusters of small brilliant red berries, much more spectacular than the orange of the species. Dark green foliage is silvery beneath.

#### Sorbus × hybrida Oak-leaf Mountain Ash



Zone: 3 Height: 30' Spread: 20' Shape: Upright with ascending branches, oval head Foliage: Lobed, divided Fall Color: Rust Flower: White, in clusters Fruit: Red, in clusters

Originating as a hybrid in Scandinavia, this Mountain Ash has an unusual leaf similar to English Oak, but divided to the midrib near the leaf base.

#### Stewartia

#### Stewartia pseudocamellia Japanese Stewartia



Zone: 6 Height: 30' Spread: 20' Shape: Pyramidal to oval Foliage: Medium to dark green Fall Color: Orange, red, purple Flower: White, orange anthers, 2½"

Camellia-like white flowers appear on this medium sized tree in July and August. Kaleidoscopic fall color includes red, orange and purple tones. Beautiful cream and tan patches are revealed as its trunk exfoliates with age.

### Styphnolobium

#### Japanese Pagoda Tree

#### Styphnolobium japonicus 'Halka' Millstone™ Japanese Pagoda Tree



Zone: 5 Height: 45' Spread: 35' Shape: Broadly oval to round Foliage: Lustrous dark green

Fall Color: Yellow Flower: Creamy white, in clusters

Symmetrical and upsweeping branches form a dense rounded crown. Less susceptible to stem canker than the species, its uniform growth habit and distinctive form are additional reasons to choose this cultivar.



#### Snowbell

### Styrax japonicus 'Evening Light' PP24168 Evening Light Snowbell



Zone: 5 Height: 15' Spread: 10' Shape: Upright, oval Foliage: Dark purple Flower: White

Glossy deep purple foliage is unique among snowbells, providing a dramatically dark backdrop for fragrant white, bell shaped flowers that appear in June. With adequate soil moisture, some reblooming will occur.



#### Styrax japonicus 'Fragrant Fountain' PP 19664 Fragrant Fountain Snowbell



Height: 8' Spread: 6' Shape: Weeping Foliage: Dark green, fine textured Fall Color: Yellow Flower: Pure white, bell-shaped

**Zone:** 5

A cascade of fragrant blooms and dark green, glossy leaves smother the delicately weeping branches of this small garden-sized tree. It blooms heavily from a young age, and appears more tolerant of temperature extremes than most seedlings of the species. The leader is easily trained to reach a desired height, from which it weeps gracefully.

#### Styrax japonicus 'JLWeeping' PP 23755 Marley's Pink™ Snowbell



*A* 

Strong nursery growth, bold foliage and improved form recommend this selection over other pink weeping Snowbell selections. Large, firm flowers and gracefully cascading character make it an all season winner for the ornamental garden.

#### Styrax japonicus 'JFS 6SJ' PP 34817 Nightfall<sup>®</sup> Snowbell



Cell Zone: 5 Height: 8' Spread: 6' Shape: Weeping Foliage: Dark purple Flower: White



A cascade of dark purple leaves tumble from the branches of this elegant weeping tree. The dense, dark, refined foliage sets a lush, high-contrast backdrop for white buds of late spring that open to creamy white, bell-shaped flowers. Bare branches etch a graceful waterfall in the winter landscape.





Pearl-like white flower buds ring in spring when they open to reveal creamy white, bell-shaped blooms. They tumble above a cascade of dark purple leaves borne on refined, weeping branches.

Fragrant Fountain Snowbell



65



Styrax japonicus 'JFS-D'





An inverted icy snow cone treat inspired the name of this superior selection of Japanese Snowbell that flowers at an early age and resists winter twig dieback. Its dense, dark green, refined foliage and symmetrical branch structure form a narrow tree of great uniformity that lends a air of formality to landscapes.

#### Styrax japonicus 'JFS-E' Snow Charm<sup>®</sup> Snowbell



Height: 20' Spread: 20' Shape: Rounded Foliage: Dark green Fall Color: Yellow Flower: Pure white, bell shaped

**Zone:** 5

Reliable and easy to grow, this Schmidt introduction selected from a highly variable species assures a rounded form. Like Snowcone<sup>®</sup>, it resists twig dieback, but has larger leaves and a broader, more traditional form.

#### Styrax japonicus 'JFS-D' Snowcone<sup>®</sup> Snowbell



Zone: 5 Height: 25' Spread: 20' Shape: Broadly pyramidal, dense Foliage: Dark green, fine textured Fall Color: Yellow Flower: Pure white, bell shaped

Fine textured foliage is dense and dark green, combining with symmetrical, upright branches to create a slender tree of great uniformity. It is resistant to twig dieback that is common in seedling grown trees.

### Styrax japonicus 'Spring Showers' Spring Showers Snowbell



Zone: 5 Height: 20' Spread: 15' Shape: Upright oval Foliage: Dark green Fall Color: Yellow Flower: Pure white, bell shaped

Bud break that takes place two to three weeks later than is typical of the species allows this U. S. National Arboretum release to be successfully grown in areas subject to late spring freezes.

#### Styrax obassia Fragrant Snowbell



Height: 25' Spread: 20' Shape: Oval Foliage: Dark green Fall Color: Yellow Flower: White, fragrant, in chains

**Zone:** 5

Loose chains of fragrant pure white flowers decorate the canopy in late spring. Blooming about two weeks earlier than *S. japonicus*, its larger, rounded leaves and upright spreading branches give it a bolder texture and a striking winter silhouette.

### .

www.jfschmidt.com

### Syringa

#### Lilac - Tree Form

#### Syringa 'SMSJBP7' PP 26549 Bloomerang<sup>®</sup> Dark Purple Lilac



Zone: 3a Height: 8' Spread: 5' Shape: Rounded Foliage: Green Fall Color: Yellow Flower: Dark purple, fragrant

A sturdy standard raises the fragrant blooms of this popular shrub to nose and eye level. The springtime display of dark purple flowers is repeated until late summer, adding months of colorful and pollinatorfriendly blooms to the garden. Vigorous and deer resistant.



### Syringa

#### Tree Lilac

#### Syringa pekinensis 'Zhang Zhiming' Beijing Gold® Tree Lilac



Zone: 5 Height: 20' Spread: 20' Shape: Upright spreading Foliage: Dark green Fall Color: Yellow Flower: Yellow, in clusters

Sprays of yellow flowers borne in June bring a whole new color spectrum to the world of tree lilacs! This is a vigorous selection with upright spreading, arching branches in a species that matures to a small size.



#### Syringa pekinensis 'Morton' China Snow<sup>®</sup> Tree Lilac Zone: 5



Height: 20' Spread: 20' Shape: Upright spreading Foliage: Dark green Fall Color: Yellow Flower: Creamy white clusters

Large sprays of cream-white flowers are borne in June by this small ornamental tree. Amber to orange-brown exfoliating bark extends seasonal interest through the winter months.

#### Syringa pekinensis 'WFH2' Great Wall<sup>®</sup> Tree Lilac



Zone: 3 Height: 20' Spread: 12' Shape: Upright oval Foliage: Dark green, glossy Fall Color: Golden yellow Flower: Bright white, in clusters

Sparkling white flower clusters in late spring, glossy green foliage, and cherry-like, exfoliating bark recommend this compact beauty as an allseason ornamental. Pest and disease resistance, adaptability and small stature merit its inclusion in our UtiliTrees<sup>™</sup> program.

#### Syringa reticulata 'Ivory Silk' Ivory Silk<sup>®</sup> Japanese Tree Lilac



Zone: 4 Height: 20' Spread: 15' Shape: Upright spreading becoming rounded Foliage: Dark green Fall Color: Golden yellow Flower: Creamy white panicles

Large plumes of small white flowers smother its branches in early summer.

### Taxodium

#### Bald & Pond Cypress

Taxodium distichum
Bald Cypress



Zone: 5 Height: 55' Spread: 30' Shape: Pyramidal Foliage: Medium green, deciduous conifer Fall Color: Rusty orange

Native to wetlands of the South, bald cypress is also surprisingly tolerant of dry soils and is hardy enough to survive in parts of southern Canada. A deciduous conifer, it has done well in urban street plantings.



#### Taxodium distichum 'JFS-SGPN' Green Whisper<sup>®</sup> Bald Cypress



Zone: 5 Height: 55' Spread: 30' Shape: Pyramidal Foliage: Fresh, bright green Fall Color: Rusty orange

The freshest, softest, brightest green foliage that we have seen in a bald cypress gives this tree an inviting appearance and the appeal of a fluffy green feather pillow. Vigorous growth and upright pyramidal form also make it stand out from seedlings. GREEN Bald Cypress

Taxodium distichtum 'JFS-SGPN'



Tantalizingly soft, feathery green foliage turns to rich rusty orange in autumn. Refined needles fall to reveal handsome winter branches that let winter sunlight shine through.

67



68

Taxodium ascendens 'Carolyn Malone'



Delicate-looking foliage is heat-tolerant and tough. A uniform growth rate, predictably narrow form and tolerance of extremes ranging from drought to standing water make this remarkable tree a great choice for challenging landscapes.

Lindsey's Skyward Bald Cypress



#### Taxodium distichum 'Skyward' PP 22812 Lindsey's Skyward™ Bald Cypress

Zone: 5

Height: 25'



Spread: 10' Shape: Upright columnar Foliage: Green, deciduous needles Fall Color: Rusty orange

The branch habit is remarkably upright, resulting in a deciduous conifer with a completely unique appearance. Unlike all previous bald cypress cultivars, its branches ascend stiffly and tightly to form a symmetrical column.

#### Taxodium distichum 'Mickelson' Shawnee Brave<sup>™</sup> Bald Cypress



Zone: 5 Height: 55' Spread: 20' Shape: Narrowly pyramidal Foliage: Green, deciduous needles Fall Color: Rusty orange

A deciduous conifer which has proven to be widely adaptable to city conditions, it will grow in standing water or in well drained soils.



#### Taxodium ascendens 'Carolyn Malone' Greenfeather<sup>®</sup> Pond Cypress



Zone: 5 Height: 50' Spread: 20' Shape: Narrow, pyramidal Foliage: Light green Fall Color: Rusty orange

Soft, feathery, bright green foliage is as light and airy as its name implies, and heat tolerant, too. Selected by John Malone of Summershade Nursery in Georgia. This upright, narrow selection offers a uniform growth rate while tolerating extremes including drought and standing water conditions.

### Tilia

#### Linden

#### Tilia × euchlora Crimean Linden



Zone: 5 Height: 40' Spread: 35' Shape: Broadly pyramidal to oval Foliage: Glossy medium green Fall Color: Yellow

Exceptionally nice foliage is glossy medium green. Individual leaves turn bright yellow in the fall, giving the tree a mottled look with contrasting bright green and bright yellow leaves scattered throughout. Golden green twigs add winter interest.

#### Tilia × flavescens 'Glenleven' Glenleven Linden



Zone: 3 Height: 50' Spread: 30' Shape: Pyramidal Foliage: Medium green Fall Color: Yellow

Glenleven is very similar to a *Tilia cordata*, but is faster growing and is now recognized as a hybrid. It produces a pyramidal form that matures to a greater height, and is a bit more open and informal than Greenspire<sup>®</sup>.

Tilia tomentosa 'PNI 6051'

#### Green Mountain® Linden



Zone: 5 Height: 45' Spread: 35' Shape: Broadly pyramidal to oval Foliage: Dark green with silvery-white undersurface Fall Color: Yellow

Upright, symmetrical growth habit forming a dense canopy. Wind causes a shimmering effect as it ruffles the dark green leaves to reveal the silvery white undersides.



Tilia - Linden

69





#### Tilia tomentosa 'Sterling' **Sterling Linden**



**Zone:** 5 Height: 45' Spread: 35' Shape: Broadly pyramidal Foliage: Leaves green with silver-gray undersurface Fall Color: Yellow

#### INSECT RESISTANCE: Japanese beetle

A vigorous growing tree with a very neat and symmetrical shape. Its two-tone leaves, dark green above and silver below, shimmer in the slightest breeze. Thanks to their fuzzy (tomentose) texture, they resist the feeding of insects.



#### Tilia americana

#### **American Linden**

#### Tilia americana 'McKSentry' American Sentry<sup>®</sup> Linden



**Zone:** 3 Height: 45' Spread: 30' Shape: Pyramidal, symmetrical Foliage: Medium green Fall Color: Yellow

This handsome and hardy cultivar of the native American basswood was introduced by McKay Nursery of Wisconsin. It develops a very straight trunk that supports a well-branched, very uniform canopy.

#### Tilia americana 'Boulevard' **Boulevard Linden**



Height: 50' Spread: 25' Shape: Narrowly pyramidal Foliage: Medium green Fall Color: Yellow

**Zone:** 3

Zone: 3

Tall and narrow, this selection of the native American Basswood is very hardy and well suited to street plantings.

#### Tilia americana 'Redmond' **Redmond Linden**



Height: 35' Spread: 25' Shape: Densely pyramidal Foliage: Light green Fall Color: Yellow

Rapid growth and heavy caliper development at a young age give this sturdy cultivar a head start in the nursery and in the landscape. Large leaves give it a coarser textured appearance as it matures to a pyramidal and symmetrical shape.

#### Tilia cordata

#### Littleleaf Linden

#### *Tilia cordata '*Corzam' **Corinthian® Linden**



**Zone:** 3 Height: 45' Spread: 15' Shape: Narrowly pyramidal Foliage: Dark green Fall Color: Yellow

This is the narrowest of the Linden cultivars. Small, thick, deep green leaves give it a finer textured, more delicate appearance.

#### *Tilia cordata 'Greenspire'* **Greenspire®** Linden



Height: 40' Spread: 30' Shape: Pyramidal, symmetrical Foliage: Dark green Fall Color: Yellow

**Zone:** 4

Introduced in 1961, this durable cultivar has become the standard of comparison among the Lindens. It has a strong central leader, very uniform branch arrangement and a symmetrical, pyramidal form.

Tilia - Linden



**Harvest Gold Linden** 



Summer Sprite<sup>®</sup> Linden



#### *Tilia cordata* × *mongolica* 'Harvest Gold' **Harvest Gold Linden**



**Zone:** 3 Height: 40' Spread: 30' Shape: Pyramidal Foliage: Deep green Fall Color: Bright golden yellow

Very hardy and faster growing in the nursery than T. cordata cultivars, this Linden sports deep green, glossy foliage through the summer months. Its name is inspired by a mantle of bright golden yellow leaves in autumn.

## Tilia cordata 'Baileyi' Shamrock® Linden



Zone: 4 Height: 40' Spread: 30' Shape: Pyramidal, symmetrical Foliage: Dark green Fall Color: Yellow

A pyramidal form of linden, similar to Greenspire®, but a little faster growing. It branches more uniformly around the trunk at an earlier age.



**Zone:** 4 Height: 20' Spread: 15' Shape: Semi-dwarf, rounded pyramid Foliage: Green Fall Color: Yellow

Perfect for confined city spaces, this natural semidwarf develops a dense and compact form with a rounded to upright oval shape and a sheared appearance.



### American Elm

#### Ulmus americana 'JFS-Prince II' Colonial Spirit<sup>®</sup> Elm



Zone: 4 Height: 65' Spread: 50' Shape: Vase with arching limbs Foliage: Dark green Fall Color: Yellow

#### DISEASE TOLERANCE: Dutch elm disease

Strong branch structure is manageable in both the nursery and the landscape, resulting in a symmetrically vase shaped tree of classic American elm form. This survivor of Dutch elm disease has proven tolerant by surviving controlled testing.

#### Ulmus americana 'Jefferson' Jefferson Elm



Zone: 4 Height: 70' Spread: 50' Shape: Vase with arching limbs Foliage: Dark green Fall Color: Yellow

#### DISEASE TOLERANCE: Dutch elm disease

Deep green foliage and an upright vase shape distinguish this selection of our North American native elm. Tested and shown to be Dutch elm disease tolerant, the impressive original tree grows on the National Mall in Washington, DC.



### **Own Root American Elm**

As disease resistant elm cultivars become more available in the nursery trade, be sure yours are grown on their own roots or on disease resistant rootstocks! Asian hybrids will retain their disease resistance whether propagated "own root," or budded or grafted onto *U. pumila* or *U. parvifolia* rootstocks. Because American elm cultivars are not compatible with these rootstocks, they are sometimes budded or grafted on to American elm rootstock, an unacceptable practice that negates their disease resistance. "Own root" propagation is the only proven way to propagate disease resistant American elms, and the method we use to assure you of healthy trees.

#### Ulmus americana 'New Harmony' New Harmony Elm



Zone: 4 Height: 70' Spread: 65' Shape: Vase with arching limbs Foliage: Medium green Fall Color: Yellow

DISEASE TOLERANCE: Dutch elm disease

Introduced by the U.S. National Arboretum, this tree features the classic vase shape of the American elm along with a high level of disease tolerance. Vigorous growing and slightly narrower than Valley Forge.

#### Ulmus americana 'Lewis & Clark' Prairie Expedition<sup>®</sup> Elm



Zone: 2b Height: 55' Spread: 60' Shape: Broad, rounded to spreading vase Foliage: Dark green Fall Color: Yellow

#### DISEASE TOLERANCE: Dutch elm disease

Extremely cold hardy, this Plains-tough American native descends from a lone survivor of Dutch elm disease found near Fargo, ND. Fast growth of the broad spreading, vase shaped canopy delivers quick shade in cold prairies and harsh urban environments.

#### Ulmus americana 'Princeton' Princeton Elm



Height: 65' Spread: 50' Shape: Upright vase Foliage: Dark green Fall Color: Yellow

Zone: 4

#### DISEASE TOLERANCE: Dutch elm disease

Introduced in 1922 by Princeton Nurseries of New Jersey, it has proven for more than a century to be tolerant of Dutch elm disease. Dark green foliage and upright, symmetrical form recommend it for street tree plantings.

#### Ulmus americana 'Valley Forge' Valley Forge Elm



Zone: 4 Height: 70' Spread: 70' Shape: Broad vase with arching limbs Foliage: Medium green Fall Color: Yellow

#### DISEASE TOLERANCE: Dutch elm disease

This National Arboretum introduction has tested best for Dutch elm disease tolerance, bringing hope for the return of the American elm. Fast growing but a little wild in the nursery, it matures to form a stately vase shaped crown.



#### Ulmus parvifolia

Lacebark Elm

#### Ulmus parvifolia 'Emer II' Allee<sup>®</sup> Elm



Zone: 5 Height: 50' Spread: 35' Shape: Upright vase, arching Foliage: Medium green, glossy Fall Color: Yelloworange to rust red

#### **DISEASE TOLERANCE:** Dutch elm disease and phloem necrosis

Tall, upright and arching, this cultivar's growth habit is unique among *U. parvifolia* cultivars, being reminiscent of the grand American Elm. Its exfoliating bark creates a mosaic of orange, tan and gray, a beautiful sight on a mature tree. Discovered by Dr. Michael Dirr of University of Georgia, Athens.



**Ulmus -** Elm



Jeijerson Elm



**Ulmus -** Elm





Ulmus davidiana 'JFS KW2UD'



Strong branches with open angles form an upright, vase shape reminiscent of the classic American Elm. Disease-resistant green leaves turn rich yellow in autumn.

#### Ulmus parvifolia 'JFS-Barrett' **Emerald Flair® Elm**



**Zone:** 5 Height: 40' Spread: 35' Shape: Upright spreading vase Foliage: Deep green Fall Color: Red to orange-red

#### DISEASE TOLERANCE:

Dutch elm disease and phloem necrosis

This tree features the best summer foliage we have seen in the species. The deep, dark green foliage is so healthy that it stands out from other selections. Broadly vase shaped with arching branches, it has better red fall color than most cultivars.



Zone: 5 Height: 35' Spread: 30' Shape: Rounded Foliage: Dark green Fall Color: Yellow, tinged red and purple

#### **INSECT RESISTANCE:** elm leaf beetle DISEASE TOLERANCE: Dutch elm disease

Vase-shaped in youth, this relatively small and compact elm develops a rounded shape with age. New growth may be flushed with pink or red before maturing to green. Selected by nurseryman/arborist Jim Barborinas as the best of Ulmus chenmoui seedlings shared by Dr. George Ware of Morton Arboretum.

#### Ulmus davidiana 'Morton' Accolade<sup>®</sup> Elm



Zone: 4 Height: 70' Spread: 60' Shape: Vase with arching limbs Foliage: Glossy, dark areen Fall Color: Yellow

**INSECT RESISTANCE:** Elm leaf beetle **DISEASE TOLERANCE:** Dutch elm disease and phloem necrosis

Arching limbs and a graceful vase shape characterize this outstanding hybrid elm selected and tested at Morton Arboretum. Glossy dark green foliage changes to yellow in the fall and is resistant to elm leaf beetle feeding. Growth habit gives good form in the nursery and an ultimate form like the American elm.

#### Ulmus davidiana 'JFS KW2UD' Greenstone<sup>®</sup> Elm



Zone: 4 Height: 60' Spread: 40' Shape: Upright vase Foliage: Medium green Fall Color: Yellow

#### **DISEASE TOLERANCE:** Dutch elm disease and phloem necrosis

Through years of testing, this vigorous grower has proven to be the top performer among trees grown from seed collected at the Northern edge of its native range in China. Its strong branches with open angles develop into an upright vase shape resembling that of the classic American elm.

#### Ulmus propingua 'JFS-Bieberich' **Emerald Sunshine® Elm**



**Zone:** 5 Height: 35' Spread: 25' Shape: Vase Foliage: Deep green Fall Color: Yellow

**INSECT RESISTANCE:** Japanese and elm leaf beetles

#### DISEASE TOLERANCE:

Dutch elm disease and phloem necrosis

Grown from seed collected in China, this sturdy, upright-growing elm was selected for superior performance on the hot, arid, windswept plains of western Oklahoma. Handsome, deeply corrugated leaves emerge coppery-bronze and mature to glossy green. Insect resistant and tolerant of heat and drought, it is a fast-growing, tough and adaptable shade tree.







#### Ulmus 'Frontier' Frontier Elm



Zone: 5 Height: 40' Spread: 30' Shape: Vase to oval Foliage: Glossy green Fall Color: Burgundy

#### **DISEASE TOLERANCE:** Dutch elm disease and phloem necrosis

'Frontier' features beautiful reddish-purple to burgundy fall color which is particularly long lasting. A U.S. National Arboretum introduction, it is a hybrid of *U. minor* and *U. parvifolia*.

#### Ulmus 'Homestead' Homestead Elm



Zone: 4 Height: 55' Spread: 35' Shape: Upright arching, narrow oval Foliage: Dark green Fall Color: Yellow

#### **DISEASE TOLERANCE:** Dutch elm disease and phloem necrosis

This fast growing hybrid Elm was developed by the USDA Nursery Crops Lab. A complex hybrid of *U. pumila, U. hollandica,* and *U. carpinifolia,* it is close in form to the American Elm.

#### Ulmus japonica × pumila 'New Horizon' New Horizon Elm



Zone: 4 Height: 55' Spread: 40' Shape: Upright oval, slightly arching Foliage: Dark green Fall Color: Yellow

#### **DISEASE TOLERANCE:** Dutch elm disease and phloem necrosis

This cold tolerant hybrid elm was developed in a disease resistance program at the University of Wisconsin. Easy to grow, straight, and symmetrical in the nursery, it becomes a rugged street tree.

#### Ulmus 'Patriot' Patriot Elm



DISEASE TOLERANCE:

Dutch elm disease and phloem necrosis

and U. glabra is especially dark green.

Stiffly ascending branches of this National

that is more narrow than typical of most elm

Arboretum introduction form a vase-shaped crown

cultivars. The boldly textured foliage of this complex

hybrid of Ulmus wilsoniana, U. pumila, U. carpinifolia

Zone: 4 Height: 50' Spread: 40' Shape: Upright, narrow vase Foliage: Dark green Fall Color: Yellow

# EMERALD SUNSHINE

**Ulmus -** Elm

Ulmus propinqua 'JFS-Bieberich'





Zelkova





Wireless® Zelkova

Triumph<sup>™</sup> Elm

#### Ulmus wilsoniana 'Prospector' Prospector Elm



Zone: 4b Height: 40' Spread: 30' Shape: Vase Foliage: Deep green, glossy Fall Color: Yellow

INSECT RESISTANCE: elm leaf beetle

#### DISEASE TOLERANCE:

Dutch elm disease and phloem necrosis

This cultivar forms a broadly vase shaped crown at an early age, and provides the form and toughness of the American Elm without its problems. This National Arboretum introduction has proven to be widely adaptable to climatic extremes.

#### Ulmus 'Morton Glossy' Triumph™ Elm



Height: 55' Spread: 45' Shape: Upright oval to vase Foliage: Glossy dark green Fall Color: Yellow

**Zone:** 4

**DISEASE TOLERANCE:** Dutch elm disease and phloem necrosis

Remarkably dark green and glossy foliage and a sturdy, symmetrical growth habit distinguish this Morton Arboretum introduction. Hybrid parentage is *Ulmus wilsoniana*, *U. japonica*, and *U. pumila*.

#### Zelkova

#### Zelkova serrata 'JFS-KW1' PP 20996 City Sprite<sup>®</sup> Zelkova



Zone: 5 Height: 24' Spread: 18' Shape: Compact oval to vase Foliage: Bright green, fine textured Fall Color: Yellow

www.jfschmidt.com

Compact, dense, and semi-dwarf, this is the perfect little tree for tight urban spaces. Summer foliage appears brighter green than typical Zelkova. Short internodes, fine textured foliage, and a tidy growth habit promise a low maintenance city tree.

#### Zelkova serrata 'Green Vase' Green Vase<sup>®</sup> Zelkova



Zone: 5 Height: 45' Spread: 30' Shape: Vase with upright arching branches Foliage: Green Fall Color: Orange

A vigorous Zelkova selection, producing a taller, more graceful tree than 'Village Green'. Its finer textured foliage produces dappled shade.



74



#### Zelkova serrata 'Musashino' Musashino Columnar Zelkova



Zone: 5 Height: 45' Spread: 15' Shape: Very narrow upright vase Foliage: Medium green Fall Color: Yellow

Ideal for narrow street use, tightly upright branches allow good vehicle and pedestrian clearance beneath the delicate green canopy.

#### Zelkova serrata 'Village Green' Village Green™ Zelkova



Zone: 5 Height: 40' Spread: 40' Shape: Rounded vase Foliage: Deep green Fall Color: Rusty red

This widely used cultivar is more upright and faster growing than the species. Foliage is very dense, dark green and presents a clean appearance.

### Zelkova serrata 'Schmidtlow' **Wireless® Zelkova**



Zone: 5 Height: 24' Spread: 36' Shape: Broadly spreading vase Foliage: Medium green Fall Color: Red

Selected for its unusually low height and broad, horizontally spreading growth habit, its vivid red fall color is a surprisingly bright bonus feature. As its name suggests, this cultivar is a good fit for street plantings beneath utility lines. Like the species, it is a trustworthy performer in urban settings.

#### Zelkova serrata 'JFS KW4ZS' PP 34818 Zileration<sup>®</sup> Zelkova



Zone: 5 Height: 30' Spread: 25' Shape: Compact vase Foliage: Dark green, fine textured Fall Color: Rusty orange

Selected for its unusually compact structure and intermediate size, this upright, vase-shaped tree is a better fit for many landscape settings than typically larger cultivars of the species. Clean, dark green summer foliage, symmetrical branching and a dense canopy make it a standout among Zelkova cultivars.





Zelkova

Zelkova serrata 'JFS-KW1' PP 20996



Vigorous growth habit and a compact, dense, semi-dwarf form recommend this as the perfect tree for tight urban spaces, courtyards and small-scale gardens.

### Bringing a new tree to market

PERFORMANCE





Above Platanus +/- 20 Years of R&D

#### CHICAGOLAND GROWS® INTRODUCTION

Exclamation!<sup>®</sup> London Planetree Platanus x acerifolia' Morton Circle'

Growing trees is an exercise in patience and faith in the future. It takes a long time and many skilled hands to grow beautiful, resilient, durable trees that will cast shade for future generations. Bringing new and improved trees to the marketplace is a collaborative, multi-generational effort that takes even longer.

Our illustration chronicles the creation of the relatively fast-growing Exclamation!<sup>®</sup> London Planetree. In the early '80's, Dr. George Ware of Morton Arboretum set out to develop Platanus cultivars with superior anthracnose resistance. One outstanding hybrid became Exclamation!<sup>®</sup> and was introduced by Chicagoland Grows.<sup>®</sup> JFS sold its first Exclamation!<sup>®</sup> bare root liners in 2009. Among those was the tree pictured on Page 53 that now grows in an allée of matching trees on a downtown Portland street.

We are grateful for the tree growth timeline which so elegantly illustrates the time and teamwork it takes to introduce a superior new tree. Created by John Evans, Principal at Hoerr Schaudt Landscape Architects of Chicago, Illinois, and used with permission. © Hoerr Schaudt Landscape Architects.





YEAR 10-14:YEAR 15:Transplant or Root Prune, Canopy Prune<br/>Harvest 5-6" Caliper TreeHarvest 8-10"<br/>Caliper TreeNursery Production - Large trees

COLLABORATION BREEDING

Turn the pages of our Redpointe<sup>®</sup> Maple family album, and you'll see this kid growing up to play a starring role in our arboretum. From a bare root tree planted in 2009, it has grown more beautiful with each passing year, as illustrated in this six-year growth sequence. Fall color is delightfully bright, and summer foliage deliciously dark green. Balanced, well-behaved growth and strong branch attachments with ideal angles make it an easy-care tree in the nursery, streetscape, park or garden. Improved pest and disease resistance plus tolerance of heat, drought, and alkaline soils helped this youngster graduate at the top of its class. Seventeen years in the making, Redpointe® Maple outperformed thousands of other red maple seedlings being trialed by our New Plant Development Department. Introduced in 2006, it has proven remarkably adaptable and is our top selling shade tree.







Trees worthy of our UtiliTrees<sup>™</sup> designation are those best suited for planting in the restricted zone between street and sidewalk and beneath utility lines. Their short stature at maturity makes them less likely to tangle with overhead lines.

Pedestrian-friendly branching is compact or vase-shaped to allow for pruning without destroying the shape of the tree. These disease and pestresistant cultivars require minimal maintenance and are tolerant of varied soils, climates and urban growing conditions.

Landscape architects, urban foresters, utility company arborists and other tree specifiers are invited to use our TreeLocator<sup>SM</sup> service to find these trees in their region, grown to landscape size by our customers.

Our UtiliTrees™ selections are identified with this icon.



Visit www.utilitrees.com to download a PDF that includes all of our UtiliTrees<sup>™</sup> selections.

### We welcome your visit!

We invite you to see for yourself what sets our nursery apart from the others. We look forward to showing you our wide range of high-quality trees and our varied product lines. We'll tailor a personalized tour that will best serve your plant needs and help you grow your business.

The J. Frank Schmidt Jr. Arboretum is available for customer use and enjoyment, serving as "the showroom floor" for our trees. Established in the 1980's, it showcases the 500+ tree species and cultivars we grow, giving visitors the opportunity to see and experience our trees at maturity.

Landscape designers, urban foresters and other specifiers are welcome, as are students who wish to learn more about trees. The show of flower, fruit, foliage and form changes daily throughout the year. Schmidt family and staff encourage you to bring your camera and enjoy.



This map follows the USDA cold hardiness system, which is based on average minimum temperatures in each area and gives a guideline for plant adaptability.

Plant material in our catalog is rated with a USDA zone number, which is correct to the best of our knowledge. Zones can be divided further into "a" or "b". When used, "a" refers to the colder half of the zone and "b" to the warmer half. For example, Zone 4a indicates temperatures of -25 to -30 °F. However, we cannot be responsible for hardiness since growing conditions, site selection and unusual winter weather will affect winter survival.

Additional cold hardiness zone information and an interactive GIS-based map, searchable by ZIP Code, may be found at: http://jfss.co/USDAZones



### Approximate Range of Average Annual Minimum Temperatures for Each Zone



Acer (Maple)	4
buergerianum (Trident)	4
campestre (Hedge)	
circinatum (Vine)	4
freemanii (Freeman)	5
ginnala (Amur)	6
glabrum (Rocky Mountain)	6
grandidentatum (Big Tooth)	6
griseum (Paperbark)	7
henryi (Henry)	8
japonicum (Fullmoon)	8
macrophylluym (Bigleaf)	8
miyabei (Miyabei)	8
negundo (Box Elder)	9
nigrum (Black)	
palmatum (Japanese)	
platanoides (Norway)10	
pseudosieboldianum (Korean)	
rubrum (Red)12	
saccharinum (Silver)14	
saccharum (Sugar)1	
shirasawanum (Full Moon)	
tataricum (Tatarian)12	
truncatum (Shantung)	
Aesculus (Buckeye, Horsechestnut)	
Alaskan Cedar – Chamaecyparis	
Alder – Alnus	
Alnus (Alder)	
Amelanchier (Serviceberry)	
Asimina (Pawpaw)	
<b>Ash</b> – <i>Fraxinus</i>	
Aspen – Populus	
Bald Cypress – Taxodium	
Beech – Fagus	
Betula (Birch)	
Birch – Betula	
Buckeye – Aesculus	
Carpinus (Hornbeam)	
Catalpa	
Cedar – Cedrus	
Cedrus (Cedar)	
Celtis (Hackberry)	
Cercidiphyllum (Katsura Tree)	
Cercis (Redbud)	
Chamaecyparis (Alaskan Cedar, Hinoki Cypress) 23	
Cherry, Japanese – Prunus	
Chionanthus (Fringe Tree)	
Chitalpa	
•	Q.
Chokecherry – Prunus 5	
Chokecherry – Prunus	5
Chokecherry – Prunus	5 8

Cornelian Cherry – Cornus	
Cornus (Cornelian Cherry, Dogwood)	29
Corylus (Filbert, Turkish Hazel)	32
Cottonwood – Populus	55
Crabapple – Malus	43
Crataegus (Hawthorn)	32
Dawn Redwood – Metasequoia	
Dogwood – Cornus	29
Elm – Ulmus	70
Eucommia (Hardy Rubber Tree)	33
Fagus (Beech)	34
Filbert – Corylus	32
Franklinia (Franklin Tree)	35
Fraxinus (Ash)	
Fringe Tree – Chionanthus	28
Ginkgo	
Gleditsia (Honeylocust)	
Goldenrain Tree – Koelreuteria	40
Gymnocladus (Kentucky Coffee Tree)	37
Hackberry – Celtis	24
Halesia (Silverbell)	38
Hamamelis (Witch Hazel)	
Hardy Rubber Tree – Eucommia	33
Hawthorn – Crataegus	32
Heptacodium (Seven-son Flower)	
Hibiscus (Rose of Sharon)	
Hinoki Cypress – Chamaecyparis	
Honeylocust – Gleditsia	
Hophornbeam – Ostrya	51
Hornbeam – Carpinus	
Horsechestnut – Aesculus	
Hydrangea	
Japanese Pagoda Tree – Styphnolobium	
Japanese Umbrella Pine – Sciadopitys	
Katsura Tree – Cercidiphyllum	
Kentucky Coffee Tree – Gymnocladus	
Koelreuteria (Goldenrain Tree)	
Lilac –Syringa	
Linden – Tilia	
Liquidambar (Sweetgum)	
Liriodendron (Tulip Tree)	
Locust – Robinia	
Maackia	
Maclura (Osage Orange)	
Maidenhair Tree – Ginkgo	
Magnolia	
Malus (Crabapple)	43
Maple – Acer	.4
Metasequoia (Dawn Redwood)	.4 50
-	.4 50 64

Oak – Quercus	. 59
Osage Orange – Maclura	. 42
Ostrya (Hophornbeam)	. 51
Oxydendrum (Sourwood)	. 51
Parrotia	. 51
Pawpaw – Asimina	. 21
Pear, Flowering – Pyrus	. 58
Phellodendron (Cork Tree)	. 52
Picea (Spruce)	. 52
Pine – Pinus	. 53
Pinus (Pine)	. 53
Pistacia (Pistache)	
Planetree – Platanus	
Platanus (Planetree)	
Plum, Purple Leaf – Prunus	
Poplar – Populus	
Populus (Aspen, Cottonwood, Poplar)	
Prunus (Cherry, Japanese)	
Prunus (Chokecherry)	
Prunus (Plum, Purple Leaf)	
Pyrus (Pear, Flowering)	
Quercus (Oak)	
Redbud – Cercis	
Robinia (Locust)	
Rose of Sharon – Hibiscus	
Salix (Willow)	
Sassafras	
Sciadopitys (Japanese Umbrella Pine)	
Serviceberry – Amelanchier	
Seven-son Flower – Heptacodium	
Silverbell – Halesia	
Snowbell – Styrax	
Sorbus (Mountain Ash)	
Sourwood – Oxydendrum	
Spruce – Picea	
-	
Stewartia Styphnolobium (Japanese Pagoda Tree)	
Styrax (Snowbell)	
<b>Sweetgum</b> – Liquidambar	
Syringa (Lilac)	
Taxodium (Bald Cypress)	
Tilia (Linden)	
Tulip Tree – Liriodendron	
Tupelo – Nyssa	
Turkish Hazel – Corylus	
Ulmus (Elm)	
Willow – Salix	
Witch Hazel – Hamamelis	
Yellowwood – Cladrastis	
Zelkova	. 74





#### Location: 9500 SE 327th Ave | Mailing: P O Box 189 Boring OR 97009 phone 503-663-4128 | fax 503-663-2121 toll-free 1-800-825-8202 www.jfschmidt.com

#### Above, left to right, top to bottom:

Nightfall<sup>®</sup> Snowbell | Mt. Hood from our headquarters in Boring, Oregon Saffron Sentinel<sup>®</sup> Cornelian Cherry | Armstrong Gold<sup>®</sup> Maple | Raspberry Spear<sup>®</sup> Crabapple Afterburner<sup>®</sup> Tupelo | First Blush<sup>®</sup> Cherry | American Dream<sup>®</sup> Oak | Golden Raindrops<sup>®</sup> Crabapple

#### Front Cover, left to right:

City Sprite® Zelkova thriving on a Portland, Oregon street Ruby Dayze® Crabapple | Flashfire® Maple | Sparkling Sprite® Crabapple Emerald City® Tulip Tree | Red Sentinel™ Maple

