

## SHADE AND ORNAMENTAL TREES FOR KANSAS



This publication is intended to serve as a guide to selecting plants for the landscape. It highlights species best adapted to the extremes of the Kansas climate. The authors have also included some new and unique species and cultivars that have not been thoroughly tested in Kansas yet, but there is enough evidence to include them here.

As always, your individual site and its unique microclimate will be an overriding factor in overall plant performance.

Information about regions of the state best suited for each plant is based on research and experience. Often, however, plants suggested for the eastern one-third of the state will thrive in western areas with an appropriate site, protection and maintenance. In cases where a particular species is suspected to be only marginally appropriate for a particular region it is denoted by parentheses around the abbreviation.

The authors attempted to update the taxonomy to the current and accepted botanical names as provided by the USDA-ARS Germplasm Resources Information Network. This list is not meant to be complete, but is an attempt to suggest some trees that may perform well in your landscape. Please contact your local K-State Research and Extenion agent or a reputable industry professional if further advice is needed.

## For more information

Dirr, M.A. 1998. *Manual of woody landscape plants: Their identification, ornamental characteristics, culture, propagation and uses.* 5th ed. Stipes Publishing LLC.

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Poor, J.M. editor. 1984. *Plants that merit attention, Vol. 1 – Trees.* The Garden Club of America. Timber Press.

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KANSAS STATE UNIVERSITY
AGRICULTURAL EXPERIMENT STATION
AND COOPERATIVE EXTENSION SERVICE

Table 1. Small trees: less than 20 feet at maturity

Botanical name or cultivar	Common name	Width (feet)	Comments	Area <sup>1</sup>
Acer tataricum subsp. ginnala	Amur Maple	15–20	Can be used as a specimen, screen or grouping. One of the hardiest maples. Commonly grown with multiple stems and typically has an outstanding red color in fall.	S
Compactum		10–15	More densely branched but can be sheared for an effective barrier. Brilliant red fall color.	S
Embers		10–15	Red samaras. Brilliant red fall color.	S
Flame		15–20	Dense, small tree with red fruit and good red fall color. Seed grown.	S
Acer griseum	Paperbark Maple	10–15	Attractive during all seasons and has a bronze-red color in fall. Needs protection from the sun because it does not tolerate extreme environmental stress. Adapts to pH level. Exfoliating bark reveals cinnamon older wood.	E, C
Acer mandshuricum	Manchurian Maple	15–20	Nice, small accent tree with trifoliate leaves, red petioles and an interesting overall appearance. Needs some protection from south and west.	E, C
Acer palmatum	Japanese Maple	15–25	Outstanding specimen, accent or small shade tree with red to purple fall color. Plant to east-northeast of structure for protection. Best in southern and eastern Kansas. Too many cultivars to list – see <i>Japanese Maples</i> by Vertrees and Gregory, 2001, Timber Press.	E, C
Atropurpureum		15–25	Reddish-purple spring and early summer foliage that is attractive again in fall.	E, C
Bloodgood		15–20	One of the best for red/purple foliage color retention. Readily available.	E, C
Sango Kaku		15–25	Brilliant red in fall and the young stem also is red. Needs protection from excessive heat.	E, C
Dissectum atropurpureum		8–12	Mounded, 8- to 10-feet type with deeply dissected purple-red foilage that turns orange-red in fall.	E, C
Acer triflorum	Three-flowered Maple	15–20	Excellent small specimen tree with trifoliate leaves that are yellow to red in fall and nice exfoliating bark on young shoots. May be the hardiest of the trifoliate maples and is worth a try.	E, C
Aesculus glabra var. arguta	Texas Buckeye	15–20	Rounded habit with a large inflorescence of green and yellow flowers. Native to eastern Kansas.	E, C
Aesculus pavia	Red Buckeye	15–25	Clump-forming, rounded-top, small tree with red flowers in April and May.	E,C
Amelanchier laevis	Allegheny Serviceberry	10–15	More tree form than most serviceberries. Nice, white flower clusters and edible fruit. Good orange color in fall.	E, C
JFS-Arb	Spring Flurry Serviceberry	15–20	Strong central leader with a good, upright growth habit, nice white flower clusters, an orange color in fall and purple to blue edible fruit. Nice small tree.	E, C
Amelanchier x grandiflora	Apple Serviceberry (Juneberry)	15–25	Good for natural landscapes and birds love the red-purple-black June fruit. Light gray bark and fall foliage is yellow to red. Tends to sucker.	S
Autumn Brilliance		15–25	Attractive light gray bark and red fall foliage.	S
Cercis canadensis	Eastern Redbud	20–30	Round form that is attractive year round. Reddish-lavender flowers in early spring with glossy, heart-shaped yellow leaves in fall. Persistent pods and reddish-brown inner bark.	S
Alba		20–30	White flowers.	S
Appalachia		20-30	Striking, bright pink flowers.	S

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Table 1. Small trees: less than 20 feet at maturity (continued)

Botanical name or cultivar	Common name	Width (feet)	Comments	Area <sup>1</sup>
Covey	Lavender Twist Redbud	Varies.	Weeping form.	S
Forest Pansy		20–30	Purple-leaf type that is not as cold hardy and needs light shade and protection from southwest wind. Leaf color fades in summer.	S
Silver Cloud		20–30	Irregularly variegated with new leaves that emerge almost completely white before developing mottled sections with chlorophyll. Prefers some shade.	S
subsp. mexicana	Mexican Redbud	15–20	Smaller tree that is often multistemmed with smaller, less vibrant flowers and pubescent leaves with undulating margins. Very heat and drought tolerant. Proper location could be important in northern Kansas.	S
subsp. texensis	Texas Redbud	20–30	Typically has very glossy leaves. Some white cultivars available. Heat and drought tolerant, but cold hardiness may be a problem in northern Kansas.	S
Oklahoma		20–30	Glossy, green summer foliage. Not as winter hardy in northern Kansas.	S
Cercis chinensis	Chinese Redbud	8–12	Single-stem or shrub form that is more heavily flowered than the native eastern redbud. Typically not as cold hardy, but improved cold-hardy selections are being evaluated.	E, C
Avondale		8–12	One of the most heavily flowered redbuds available with bright neon flowers that cover the stems from the soil surface to the tips. Produces massive amounts of brown seed pods and tends to be a weak grower as a result. Immature pods can be stripped after flowering.	E, C
Don Egolf		8–12	A new introduction by the U.S. National Arboretum. Slow-growing (dwarf), seedless selection with stems that are covered in blooms from soil surface to tips of branches. Impressive in flower.	E, C
Chionanthus retusus	Chinese Fringetree	15–20	Good, dark green foliage all summer with white, fringe flowers in mid-May and semi-exfoliating bark on young stems. Appears to be pH adaptable and heat tolerant.	S
Chionanthus virginicus	Fringetree	15–20	Large shrub to small tree. Larger leaves than <i>C. retusus</i> and attractive, fringe-like flowers that appear in mid-May.	S
Cornus alternifolia	Pagoda Dogwood	20–30	Cold-hardy and good for natural landscapes. Needs cool, moist, acid soil. Horizontal branching pattern and maroon in fall.	E, C
Cornus florida	Flowering Dogwood	15–20	Widely available accent or specimen tree that needs mulch, acid soil and protection from hot sun and wind. Early white or pink flowers and red fruit that birds like to eat. Risky in northern Kansas.	E, C
Ozark Spring		15–20	A selection from the John C. Pair Horticultural Center. Flower bud hardy to -20°F. Subject to powdery mildew in moist climates.	E, C
Prairie Pink		15–20	A selection from the John C. Pair Horticultural Center that has been growing in Wichita for many years with no cold damage. Pink flowers.	E, C
Cloud Nine		20 – 30	Profuse, white flowers.	E, C
Cornus kousa	Kousa Dogwood	15–25	Horizontal branching pattern with white flower bracts that occur later than <i>C. florida</i> . Needs a sheltered location. Exfoliating bark on older specimens.	E, C

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Table 1. Small trees: less than 20 feet at maturity (continued)

Botanical name or cultivar	Common name	Width (feet)	Comments	Area
Cornus mas	Corneliancherry Dogwood	15–20	Rounded, small tree with beautiful exfoliating bark on older specimens. Small, yellow flowers bloom in masses and cover the tree in early spring. Red, cherry-like fruit can be attractive on some selections.	S
Golden Glory		15–20	More upright and tree form than the species with numerous yellow flowers followed by large, cherry-like fruit. Red to purple in fall.	S
Spring Glow		15–20	Flowers very early and more heavily.	S
Cotinus coggygria	Smoketree	10–15	Rounded specimen with green- and purple- leaf cultivars available. Striking in mass or as a specimen. Young, vigorous shoots have more color and may be cut back to produce many shoots.	S
Cotinus obovatus	American Smoketree	15–20	Rounded habit with green foliage and an outstanding orange to red mixture of color in fall.	E, C
Crataegus crusgalli	Cockspur Hawthorn	20–30	Broad, rounded form with many 2-inch thorns. White flowers, red fruit and bronze-red color in fall.	S
var. inermis	Thornless Cockspur Hawthorn	20–30	Thornless type preferred for home landscapes. White flowers and large, red fruit.	S
Crataegus laevigata Crimson Cloud	Crimson Cloud English Hawthorn	15–20	Resistant to leaf blight. Red flowers and glossy, red, persistent fruit.	S
Crataegus phaenopyrum	Washington's Hawthorn	20–25	Rounded form with thorns, white flowers, persistent red fruit and orange-red color in fall. Tolerates urban conditions.	S
Crataegus viridis Winter King	Winter King Hawthorn	20–25	Broad, rounded growth habit with good rust resistance. Glossy, green foliage and large, red fruit that persist into winter. Good rust resistance.	S
Elaeagnus angustifolia	Russian Olive	15–20	Silver-green foliage, fragrant flowers and fruit that birds like. Tolerant of salt. Thorny, short-lived and can be invasive. Best used as a wind break, but has limited use in the landscape.	S
Euonymus bungeanus	Winterberry Euonymus	10–15	Rounded, small tree or large shrub. Tolerant of poor, dry sites. Fruit becomes a showy pink to red in late summer.	S
Heptacodium miconiodies	Seven-son Flower	10–15	Small tree or large shrub with arching habit and exfoliating bark. Fragrant, white flowers in midsummer, followed by pink coloration of the calyxes as the season progresses.	E, C
Magnolia stellata	Star Magnolia	10–15	Oval to rounded shrub or small tree that requires acid soils. White, fragrant flowers in early spring. Plant to the north or northeast of structures to prevent frost damage to flowers.	E, C
Royal Star		10–15	Pink buds open to white, fragrant flowers later than <i>M. stellata</i> . Upright, densely branched shrub or small tree that becomes more rounded with age.	E, C
Malus spp.	Flowering Crabapples	Varying forms and sizes	Many cultivars available. Select for size, form, flower color, fruit color, size and retention and rust and scab resistance. Consult your local K-State Research and Extension office or nursery operator for more information. A brief list follows.	S
Adirondack		10	Strong, upright growth habit. Abundant white flowers followed by red fruit. Good disease resistance.	
Cardinal		20	Spreading habit and glossy purple to red foliage that fades a little in summer. Bright red to pink flowers and small, abundant, bright red fruit.	S

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Table 1. Small trees: less than 20 feet at maturity (continued)

Botanical name or cultivar	Common name	Width (feet)	Comments	Area <sup>1</sup>
Donald Wyman		20	Upright to rounded form that is more formal and straight. White flowers and persistent, bright red fruit.	S
Golden Raindrops		15	Vase-shaped growth habit. Glossy, green foliage and small, white flowers that appear later than most crabapples. Small, golden yellow fruit. Excellent scab and rust resistance, but susceptable to fireblight.	S
Prairiefire		20	Rounded form with age. Reddish-green foliage, crimson buds, red flowers and persistent, maroon fruit.	S
Purple Prince		20	Rounded habit with purple foliage that fades to bronze-green in summer. Red flowers followed by deep maroon, almost purple fruit.	S
Red Baron		10	Narrow, columnar form with reddish-green foliage, red flowers and red fruit.	S
Red Jade		15	Broad, weeping form with white flowers and red, persistent fruit.	S
Royal Raindrops		15	Upright growth habit with purple to red foliage that holds color, bright pink to red flowers and persistent, red fruit.	S
Spring Snow		25	Large, rounded habit. Green foliage and white flowers. An early bloomer that is fruitless and susceptible to scab.	S
Malus sargentii	Sargent Crabapple	12	Low, broad-spreading type that is often grafted on a standard to produce a unique architectural feature. Red buds that open to white flowers and bright red fruit that birds love. Many cultivars have "Sargent" in the name and all are dwarf.	S
Candymint		15	Low, spreading, dwarf form with good disease resistance. Purpletinted foliage and red fruit.	S
Sargent Tina		8	Small, rounded dwarf tree with excellent disease resistance. Pink buds open to white flowers and small red fruit.	S
Morus alba Chaparral	Chaparral Weeping Mulberry	8–12	Weeping, novelty type that is fruitless. Not recommended for wide- scale use, but makes an effective architectural feature when used sparingly.	S
Prunus spp.	Cherries	Variable	There are too many cherry cultivars and hybrids to list here. Most flower before or as leaves emerge, but some flower very early ( <i>P. mume</i> and <i>P. okame</i> ) and may be damaged by spring freezes in Kansas. Use with caution. Plant in a protected spot and avoid overwatering.	E, C
Prunus serrulata Kwanzan	Kwanzan Cherry	15–20	Vase-shaped with double pink flowers and an orange-bronze fall color. Winter hardiness is a problem in northern Kansas. Can be short-lived due to bores and cankers.	E, C
Prunus Snow Goose	Snow Goose Cherry	20	Upright growth habit. Pure white flowers and an orange fall color.	E, C
Prunus virginiana	Common Chokecherry	18–25	Oval, dense crown with white flowers and dark purple fruit. Suckering can be troublesome. Best in natural landscapes.	S
Canada Red		20	Rounded habit that originated as a branch sport of Shubert. Leaves emerge green, then turn purple as they mature. Red/purple in fall. Tree tends to root sucker profusely.	S
Shubert		20–25	Pyramidal form when young that becomes more oval. Red to purple leaves. Similar to Canada Red.	S
Pyrus fauriei Westwood	Korean Sun Pear	15–20	Small rounded tree with clusters of small, white flowers in spring and excellent orange to red color in fall.	S
Styrax japonicus	Japanese Snowbell	15–20	Irregular rounded habit with white, bell-shaped flowers in late spring and a yellow color in fall. May need protection from afternoon sun.	E, C

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Table 1. Small trees: less than 20 feet at maturity (continued)

Botanical name or cultivar	Common name	Width (feet)	Comments	Area <sup>1</sup>
Carillon		10–15	Weeping form with dark green foliage.	E, C
Emerald Pagoda		10–15	Upright form with larger, thicker leaves and larger flowers than other species. Worth a try.	E, C
Pink Chimes		10–15	Needs some training to be tree form. Beautiful pink flowers in spring.	E, C
Syringa reticulata	Japanese Tree Lilac	15–25	Oval to rounded form with fragrant, white flowers and dark green leaves. Excellent, relatively trouble-free specimen or street tree.	S
Ivory Silk		15–20	Excellent specimen with white flowers.	S
Summer Snow		15–20	Rounded and more compact than other species. Good flower production.	S
Viburnum rufidulum	Southern Blackhaw Viburnum	15–20	Large, rounded shrub or small, rounded tree depending on pruning. Beautiful flat-top cymes in spring. Fruit clusters that turn from green to pink to blue through the seasons and glossy, green foliage that turns a rich red in fall.	S
Xanthoceras sorbifolium	Yellowhorn	10–15	Small tree or large shrub with fine-textured foliage and large, beautiful individual flowers on a long raceme in mid-Spring. Cold hardy and tolerant of a wide range of soil conditions. Relatively unknown species.	S
Ziziphus jujuba	Jujube Tree or Chinese Date	15–20	Small tree or large shrub with beautiful, glossy leaves and tasty, interesting, 1-inch long fruit that turn brown when ripe.	E, C

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Table 2. Medium trees: 20 to 40 feet at maturity

Botanical name or cultivar	Common name	Width (feet)	Comments	Area
Acer buergerianum	Trident Maple	20–25	Good small lawn or street tree for southern half of Kansas that needs well-drained, acid soil. Yellow to red color in late fall. Ornamental exfoliating bark.	E, C
Acer campestre	Hedge Maple	25–35	Tolerant of varying soils, urban conditions and severe pruning. Develops attractive, corky bark with age. Yellow-green or yellow in fall.	E,C (W)
Evelyn	Queen Elizabeth Maple	25–35	Rounded with a flat top. More virgorous. Yellow in fall. Limit planting to southern half of state.	E, C (W)
Acer tataricum	Tatarian Maple	20–25	Similar to the small <i>A. tataricum subsp. ginnala</i> but slightly taller, more tree form, with larger leaves. Samaras turn bright red while maturing and can be very ornamental.	S
Acer truncatum	Shantung Maple	25–30	Adaptable lawn or street tree with reddish-purple leaves in spring and yellow-orange-red color in fall, depending on seed source. Tolerant of a variety of soil conditions.	E, C (W)
Keithsform	Norwegian Sunset Maple	20–25	A hybrid with Norway maple. Rapid growth. Yellow to orange to red in fall.	E, C
Warrenred	Pacific Sunset Maple	20–25	A hybrid with Norway maple with more spreading and a finer texture than Norwegian Sunset. Rapid growth. Yellow to orange to red in fall.	E, C
Albizia julibrissin	Mimosa	25–30	Broad spreading and clump forming. Fine-textured, bipinnately compound leaves with light pink to dark pink flowers that appear brush-like and bloom throughout summer. Can be damaged by early fall or late spring freeze or very cold winter temperatures. Susceptible to verticillium wilt. Use with caution	E, C
Summer Chocolate		25–30	Deep red to purple foliage that holds color through summer.	E, C
Betula pendula	European White Birch	20–30	Highly susceptible to heat and drought stress and borers. Reserve for protected sites with cool, moist soil. New introductions are reported to be borer resistant. Plant with caution.	E
Betula platyphylla var. japonica Whitespire	Whitespire Birch	20–30	Pyramidal form with white bark. Better heat tolerance and slightly better borer resistance than <i>B. pendula</i> . Same soil requirements as <i>B. pendula</i> .	E, C
Carpinus betulus	European Hornbeam	25–30	General rounded habit with smooth, gray bark and thick, dark green leaves that can become chlorotic in high pH soils. Overall pest-free tree that could be used statewide with some soil improvements.	E, C (W)
Fastigiata		15–21	Similar to <i>C. betulus</i> except more upright growth habit. A staple of the urban landscape throughout the country.	E, C (W)
Carpinus caroliniana	American Hornbeam	20–30	Versatile, small tree for natural landscapes that prefers moist soil and is shade tolerant. Yellow-orange-red in fall with attractive, smooth bluish-gray bark.	S
Castanea mollissima	Chinese Chestnut	30–35	Medium rounded tree with attractive serrated leaves and edible nuts.  Beautiful, long, creamy catkins (flowers) but unpleasant odor and large, spiny fruit in late summer to fall.	E, C
Cladrastis kentukea	Yellowwood	35–40	Round form with smooth, gray bark, cream-colored flowers in early summer, and a golden yellow color in fall. Bright green foliage is subject to scorch. Tolerant of alkaline or acid soils.	E, C
Perkins Pink or Rosea		35–40	Pink-flowered form of the species that is difficult to find.	E, C
Cornus controversa June Snow	June Snow Dogwood	30–40	Upright, open and spreading growth habit. Flat-top, white inflorescence with mottled orange to red color in fall.	E, C

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Table 2. Medium trees: 20 to 40 feet at maturity (continued)

Botanical name or cultivar	Common name	Width (feet)	Comments	Area
Diospyros virginiana	Persimmon	20–30	A tall, irregularly shaped tree with lustrous, dark green foliage that turns yellow to purple-bronze in fall. Attractive, small, bell-shaped flowers and persimmon fruit that can be messy. Attractive bark resembles blocky alligator skin. Good for a natural setting.	S
Evodia daniellii	Korean Evodia	20–30	Rounded canopy; dark green foliage; large clusters of small white flowers are very showy; small red and black fruit cluster add interest; widely adaptable.	S
Gleditsia triacanthos var. inermis Impcole	Imperial Honeylo- cust	35–40	Spreading branches develop at right angles to trunk. Essentially fruitless.	S
Halesia tetraptera	Carolina Silverbell	20–30	Rounded tree that needs protection from drying winds and western sun. Beautiful, bell-shaped, fragrant flowers in late spring.	E
Koelreuteria paniculata	Goldenrain Tree	30–40	Rounded form with yellow summer flowers and papery brown fruit cover in fall. Good specimen, shade or street tree, but may suffer winter injury if plants are not from northern seed sources. Can attract boxelder bugs.	S
September		30–40	Same as species, but flowers much later.	S
Maackia amurensis	Amur Maackia	20–25	Vase-shaped growth habit with nice, light green-colored foliage and beautiful, creamy-white flower clusters that stand upright in late June to early July. Prefers a well-drained soil and protection from western exposure.	E, C
Summertime		15–20	Emerging foliage is covered with silvery pubescense. Good cold hardy selection.	E, C
Maclura pomifera	Osage Orange	30–40	Tough, durable, pest- and wind-damage resistant. Attractive, glossy, green leaves and a yellow-green or yellow color in fall. May be thorny. To avoid fruit, plant male cultivars.	S
Park		30–40	Thornless and fruitless. Some thorns may occur on young wood even in the thornless cultivars. Fastest growing selection, but weak branch attachments are a liability.	S
Whiteshield		30–40	Completely thornless and fruitless, but a more upright and coarse-textured selection.	S
Wichita		30–40	John C. Pair Horticultural Center introduction that is fruitless and thornless. Young, vigorous liners may have some thorns, but they disappear with age.	S
Magnolia x soulangiana	Saucer Magnolia	15–25	Large, beautiful flowers appear in early spring before leaves emerge. Often damaged by late spring freeze. Plant in a protected site with an organic soil.	E, C
Malus spp.	Crabapple	25–30	Too many crabapples to discuss here. See K-State Research and Extension publication MF-875, <i>Flowering Crabapples</i> .	S
Morus alba	White Mulberry	30–40	Rugged tree that is yellow in fall. If fruit is not desired, plant male types. Some tip dieback in severe winters.	S
Lingan		30–40	Fast growing, fruitless and drought resistant.	S
Mapleleaf		30–40	Maple-like leaves. Fruitless.	S
Nyssa sylvatica	Black Gum (Black Tupelo)	20–30	Pyramidal to oval form that needs protection from south wind and is intolerant of alkaline soil. Often difficult to establish. Outstanding yellow, orange, red and purple color in fall.	E, C
Ostrya virginiana	Amrican Hophorn- beam (Ironwood)	20–30	Pyramidal to round form that prefers moist, acid soils with generous mulching. Tolerates partial shade. Can be difficult to start, but is durable when established. Yellow in fall.	E, C

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Table 2. Medium trees: 20 to 40 feet at maturity (continued)

Botanical name or cultivar	Common name	Width (feet)	Comments	Area
Parrotia persica	Persian Ironwood or Persain Parrotia	20–25	Low-branched, small tree with an interesting texture. Dark green, pest-free foliage that is an outstanding mottled yellow, orange and red color in fall.	E, C
Ruby Vase		10-15	More upright than the species. New foliage is tinged red. Good fall color.	E, C
Phellodendron amurense	Amur Corktree	25–30	Somewhat vase-shaped tree with attractive leaf characteristics and texture. Used in urban setting. Still being evaluated. Use with caution.	E, C
Macho		25-30	Male, seedless selection.	E, C
Phellodendron sachalinense x amu- rensee His Majesty		25–35	A hybrid, seedless selection with vigorous growth and a good branching habit.	E, C
Pistacia chinensis	Chinese Pistache	20–30	Oval-rounded form that is a spectacular orange-red in fall. Few pests or problems, but is not winter-hardy enough for northern Kansas. Obtain trees from northern sources. Female trees give rise to numerous seed that attract birds. Likely to become invasive. Look for superior male selections.	E, C
Pyrus calleryana	Callery Pear	35–40	Straight species is rarely planted, but it is used as a rootstock. May be found in the landscape as a root sucker that outgrows the budded cultivar or if the selected cultivar dies, leaving root suckers behind. Proper landscape management can eliminate this problem. Plants can be chlorotic in high pH soils.	S
Aristocrat		25–30	Showy, white flowers and an orange to red color in fall. Better branch structure than Bradford. Broad triangular shape.	S
Bradford		30–35	Rounded habit with attractive white flowers. Very susceptible to storm damage. Expect this tree to break apart as it approaches the desired size. Strangely enough, this tree can still be found in some garden centers.	See Note <sup>2</sup>
Autumn Blaze		20–25	Large, rounded shape. Earlier dormancy and better fall color than most, and most cold hardy. Susceptible to fireblight.	S
Capital		8–12	Similar to Autumn Blaze, but more narrow. Good substitute for the short-lived Lombardy Poplar.	S
Glen's Form	Chanticleer	10–15	Upright, narrow form with profuse flowering. Between Capitol and Aristocrat in growth habit.	S
Redspire		25-30	Pyramidal form. Similar to Glen's Form.	S
Trinity		20–25	Small, rounded, compact growth habit with good orange to red color in fall.	S
Quercus muehlenbergii	Chinkapin Oak	40–50	Picturesque, open, rounded form with yellow-orange-brown color in fall. Tolerates alkaline soil. Excellent shade tree. Use this tree more often.	S
Robinia pseudoacacia	Black Locust	30–40	Fast growing and adaptable to rough conditions, but should not be used for the home or commercial landscape.	S
Frisia		25-30	Similar to the black locust, but with yellow foliage.	S
Purple Robe		30–35	New growth is tinted red and has purple flower clusters. Beautiful tree when in flower. Good for tough sites.	S
Lace Lady	Twisty Baby	15–20	Contorted branches give this tree an interesting structure.	S
Sapindus drum- mondii	Western Soapberry	25–30	Rounded form that has no serious pests. Translucent, yellow-orange fruit can be messy. Do not plant over patio or walk. Yellow in fall.	S
Styphnolobium japonicum	Japanese Pagoda Tree	35–45	Creamy summer flowers followed by interesting green pods. Severe cold may cause extensive branch dieback, but is less severe if tree was from northern sources. Plant improved cultivars that have better disease resistance.	S

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Table 2. Medium trees: 20 to 40 feet at maturity (continued)

Botanical name		Width		
or cultivar	Common name	(feet)	Comments	Area
Halka	Millstone	30–35	Better stem canker disease resistance.	S
Regent		35–45	Fast growing. Flowers heavily.	S
Tilia tomentosa	Silver Linden	35–40	Symmetrical growth habit with neat, clean foliage. Dense pubescence on the underside of the leaves deters insect feeding.	E, C
Sterling		20–25	Good, broad pyramid form with silvery underside of leaves.	E, C

<sup>&</sup>lt;sup>1</sup>Area of Kansas that the tree would grow best in: E=eastern, C=central, W=western, S=statewide <sup>2</sup>Not recommended for planting in Kansas.

Table 3. Large trees: 40 to 60 feet at maturity

Botanical name or cultivar	Common name	Width (feet)	Comments	Area
Acer x freemanii	Freeman Maple		Hybrid of <i>A. saccharinum</i> and <i>A. rubrum</i> . Selections often have the rapid growth of <i>A. saccharinum</i> with the beautiful fall color of <i>A. rubrum</i> .	
Jeffersred	Autumn Blaze Maple	35–40	Upright, broad-shaped, oval habit that is widely planted (maybe over planted) because of outstanding red color in fall.	E, C
DTR 102	Autumn Fantasy Maple	35–40	Similar to the Autumn Blaze, but is broader and a deeper red in fall.	E, C
Marmo		40–45	Upright, oval growth habit that is red in fall. Reported improved resistance to frost cracking. Seedless.	E, C
Acer miyabei	Miyabei Maple	30–40	Similar in leaf to <i>A. campestre</i> but a much larger tree; good cold and drought tolerance; should be growing more in Kansas.	E, C (W)
Morton	State Street Maple	35–40	Selected by the Morton Arboretum for its superior, golden yellow growth habit. Consider trying this selection.	E, C (W)
Acer platanoides	Norway Maple	40–50	Round form provides dense shade. Tolerates of city conditions, but needs good soil and protection from southwest wind. Yellow in fall.	E, C
Columnare		10–15	Columnar form with dark green foliage.	E, C
Conzam	Conquest Maple	20–25	Red/purple foliage in spring that turns bronze in summer and red in fall.	E, C
Crimson King		40–50	Maroon foliage that tends to lose color in summer. Strong accent. Slow growing.	E, C
Crimson Sentry		20–25	A bud sport of Crimson King that grows narrow and upright and is good for tight spots. Relatively slow growing.	E, C
Ezestre	Easy Street Maple	15–20	Slightly wider and faster growing than Columnare. Upright pyramidal. Good street tree.	E, C
Princeton Gold		35–40	Golden yellow foliage that may scorch in hot summers. Protect from western exposure.	E, C
Schwedleri		40–50	Purple-red leaves in spring. Can suffer leaf tatter damage and scorch in summer.	E, C
Summershade		40–50	Oval to round habit that is more vigorous and heat resistant than other Norway maples. Green-yellow in fall.	E, C
Superform		40–50	Like Summershade, it is fast growing with a straight trunk and heavy, dark green foliage.	E, C
Acer rubrum	Red Maple	40–50	Prefers moist, acid soil and tolerates poor drainage. Needs protection from hot winds. Smooth gray bark and early yellow, orange or red in fall. Many cultivars available, but only a few are listed here.	E, C
Autumn Flame		35–40	Often suffers leaf scorch in summer. First to turn scarlet in fall.	E, C
Brandywine		25–30	A seedless selection that produces fall color later than most red maples. Well adapted to the heat of the south.	E, C
Franksred	Red Sunset Maple	35–40	Pyramidal to rounded form with good branching angle. Turns scarlet late in fall.	E, C
Magnificent Magenta	Burgundy Belle Maple	30–40	Parent tree found in northeast Kansas. Uniform outline. Persistent, impressive, deep red/burgundy in fall.	E, C
Northwood		30–35	Selected from northern Minnesota, so it is cold hardy. Has not performed well during Kansas summers.	E, C
PNI 0268	October Glory Maple	40–50	Oval-rounded form. Turns a persistent, brilliant red-orange late in fall.	E, C

<sup>&</sup>lt;sup>1</sup>Area of Kansas that the tree would grow best in: E=eastern, C=central, W=western, S=statewide

Table 3. Large trees: 40 to 60 feet at maturity (continued)

Botanical name or cultivar	Common name	Width (feet)	Comments	Area
Somerset		30–35	A new U.S. National Arboretum release with a rounded habit and a reliable, bright red in fall. Seedless.	E, C
Sun Valley		30–35	A new U.S. National Arboretum release with a symmetrical oval habit and dense branching. Seedless. Consistent red color in fall.	E, C
Acer saccharum	Sugar Maple	40–50	Oval form that is an excellent gold to red in fall. Avoid hot, dry, windy locations.	E, C
Autumn Splendor		35–40	A John C. Pair Horticultural Center release. Caddo maple selection with excellent heat and drought tolerance. Lustrous, green foliage and a reliable red color in fall. Consider planting this tree.	S
Bailsta	Fall Fiesta Maple	40–50	Upright-rounded habit with thick, dark green leaves. Fast grower that is yellow to orange to red in fall.	E, C
Bonfire		40–50	Broad-oval form that is a brilliant orange-red in fall.	E, C
Commemoration		30–40	Oval-rounded form. Vigorous grower with dense, glossy, tatter-resistant foliage that is yellow-orange-red in fall. Plant in western Kansas with some protection.	E, C
Endowment		20–25	More columnar form that is yellow in fall. Does not hold up well under drought conditions. Water to prevent excessive stress.	E, C
Flax Mill Majesty	Majesty Maple	40–50	Fast growing with large, thick leaves and excellent leaf color that is orange to red in fall. Dense tree with many branches. Appears resistant to frost cracking and sun scald.	E, C
Green Mountain		35–40	Oval form with dark green foliage that is orange-red in fall. Severe scorch reported in Kansas. Widely planted throughout the country for consistent fall color.	E, C
John Pair		25–30	A John C. Pair Horticultural Center release. Caddo maple selection with excellent heat and drought tolerance. Lustrous, green foliage and reliable red color in fall. Dense, compact growth habit. Consider planting this tree.	S
Legacy		35–40	Drought tolerant with tatter-resistant foliage that is gold to red in fall. Excellent choice for most of Kansas.	E, C
Morton	Crescendo Maple	35–40	Rounded habit with good heat and drought tolerance. Western seed source. Orange to red in fall.	E, C (W)
Alnus glutinosa	Black Alder	25–35	A very nice tree when established. Dark green foliage. Fruit adds winter interest. Nitrogen-fixing tree that tolerates wet sites and prefers protection from western exposure.	E, C
Betula nigra	River Birch	40–50	Tolerates wet sites, prefers acidic soil, responds to mulching, resistant to bronze birch borer, often sold as clumps and may be susceptible to ice damage because of its large size. Better for most Kansas conditions than European white birch. Yellow in fall. Prized for exfoliating bark.	E, C
BNMTF	Dura-Heat Birch	25–30	More heat and drought tolerant than the species. Dark green foliage does not fade to yellow as easily and has excellent bark characteristics. Currently being evaluated in western Kansas.	E, C
Cully	Heritage Birch	40–50	Larger, glossier leaves and more distinct salmon-white bark. Most common river birch.	E, C
Little King	Fox Valley Birch	15–20	An interesting accent plant that is a dwarf with compact growth. Produces a very dense head. Good exfoliating bark can be seen in winter.	E, C
Catalpa speciosa	Northern Catalpa	20–40	Oval form with large leaves that turn yellow-brown in fall. Withstands hot, dry conditions and wet or dry soil.	S
Celtis laevigata	Sugar Hackberry	40–50	Attractive, smooth, gray bark. Wildlife attracted to sweet, blue-black fruit. Resistant to witches' broom disease and dependable for southern Kansas.	S

<sup>&</sup>lt;sup>1</sup>Area of Kansas that the tree would grow best in: E=eastern, C=central, W=western, S=statewide

Table 3. Large trees: 40 to 60 feet at maturity (continued)

Botanical name or cultivar	Common name	Width (feet)	Comments	Area
All Seasons		40–50	Similar to <i>C. laevigata</i> but more cold hardy. Resistant to witches' broom disease. Dependable yellow color in fall.	S
Celtis occidentalis	Common Hack- berry	35–45	Oval to vase shaped. Wildlife attracted to fruit. Subject to witches' broom disease. Yellow in fall.	S
Prairie Pride		35–45	More compact, oval form with strong central leader. Resistant to witches' broom disease.	S
Corylus colurna	Turkish Filbert	30–40	Very tough tree when established. Formal pyramidal growth habit with good foliar characteristics and a medium texture. Yellow to purple in fall. Tolerant of urban conditions.	E, C
Eucommia ulmoides	Hardy Rubber- tree	35–45	Rounded habit with lustrous, thick, rigid, green leaves. No pest problems due to latex production in the leaves. Tolerates a variety of soil conditions.	E, C (W)
Fraxinus americana	White Ash	40–50	Ash trees are recommended, but they are susceptible to borer infestation. A healthy tree is the best defense. Round form that needs good, moist soil and, like all ashes, must be vigorous to avoid borer problems. Yellow to purple in fall.	S
Autumn Applause		25–30	Oval form that is maroon in fall. Seedless.	S
Chicago Regal		25–35	Symmetrical habit with good branching. Good deep green leaves that are orange to purple in fall. Bark is resistant to frost cracking.	S
Junginger	Autumn Purple Ash	40–45	Seedless, round form. Excellent burgundy in fall.	S
Greenville	Jade Patina White Ash	35–40	John C. Pair Horticultural Center introduction. Robust, hexaploid tree with large, lustrous, green leaves that are pale underneath. Stout stems and trunk. Nice purple to bronze in fall.	S
Rosehill		25-30	Tolerant of alkaline soils. Seedless. Bronze-red in fall.	S
Fraxinus mandshurica	Manchurian Ash	25–35	Little is known about this tree. Performed well in a few years of testing at the John C. Pair Horticultural Center. Typical ash leaf, good color, and transplants easily. Reported to have tolerance to emerald ash borer.	E, C (W)
Mancana		20–25	Selected for dense, oval habit. Tolerates dry or moist sites.	E, C (W)
Fraxinus ornus	Flowering Ash	20–25	A beautiful tree with large, white plumes of flowers. Difficult to grow, but worth the effort. Reserve for the best sites with moist, well-drained soil and moderating winter microclimates. Only the brave shall plant.	Е
Fraxinus pennsylvanica	Green Ash	35–45	See note about <i>F. americana</i> . Can grow almost anywhere, but must be vigorous to avoid borer problems. Yellow in fall.	S
Cimmzam	Cimmaron Ash	30–35	Upright form when young but becomes oval with age. Lustrous, dark green leaves that turn orange to red in fall. Seedless. Coarse-textured bark.	S
Marshall		35–40	Oval form that is usually seedless. Bright yellow in fall.	S
Oconee	Georgia Gem Ash	30–40	Upright oval that is seedless. More heat tolerant than other green ashes. Large, dark green leaves.	S
Patmore		35–40	Upright branching and oval form. Glossy, dark green leaves that are yellow in fall. Seedless.	S
Summit		20–25	Upright, pyramidal form.	S
Urbanite		35–40	Broad, pyramidal form with leathery, glossy, dark green leaves that are bronze in fall. Plant only in southern half of Kansas. Shows best resistance to borers.	S
Fraxinus quadran- gulata	Blue Ash	25–35	Broad, oval growth habit with square twigs that tolerates high-pH soils. Native to southeast Kansas. Last tree to leaf out at the John C. Pair Horticultural Center.	S
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<sup>&</sup>lt;sup>1</sup>Area of Kansas that the tree would grow best in: E=eastern, C=central, W=western, S=statewide

Table 3. Large trees: 40 to 60 feet at maturity (continued)

Botanical name or cultivar	Common name	Width (feet)	Comments	Area
Ginkgo biloba	Ginkgo	30–40	Pyramidal form that is an excellent shade tree with few problems. A good yellow in fall. Named male trees preferred because of messy fruit with unpleasant odor produced by female trees. Can develop iron chlorosis in alkaline soil.	E, C (W)
Autumn Gold		30–40	Narrow in youth but becomes broad-spreading form with age. Golden yellow in fall. Seedless male.	E, C (W)
Magyar		20–30	Narrow pyramidal. Good yellow color in fall. Seedless male.	E, C (W)
PNI 2720	Princeton Sentry	15–20	Narrow-pyramidal form. A good yellow color in fall. Seedless male.	E, C (W)
The President	Presidential Gold Ginkgo	35–45	Forms a broad oval at a young age. A good yellow color in fall. Seedless male.	E, C (W)
Gleditsia triacanthos var. inermis	Thornless Common Honeylocust	30–40	Produces seed pods under some environmental conditions. Drought and salt tolerant. Fine-textured, small leaves create filtered shade. Yellow in fall. Potential insect and disease problems. A general decline in Honeylocust across Kansas is occuring. Tends to be overplanted.	S
Halka		30–40	Oval to round form. Produces seed pods under some environmental conditions.	S
Moraine		35–40	Dark green leaves change to golden yellow in fall. Usually fruitless.	S
PNI 2835	Shademaster	35–40	More vase shaped. Produces a few pods infrequently.	S
Skycole	Skyline	30–35	Pyramidal form with ascending branches and bright golden yellow color in fall. Reduced potential for fruiting.	S
Suncole	Sunburst Honeylocust	30–40	Broad habit. New growth is bright yellow then fades to a dark yellow/green.	S
Gymnocladus dioicus	Kentucky Cof- fetree	30–40	Tough and durable with fine-textured foliage, coarse branches in winter, 5-inch pods on female trees, and no pods on male trees. Distinctive, rough bark. Yellow in fall.	S
Espresso		30–40	Oval to vase shaped wth blue-green foliage. Seedless.	S
Juglans regia	English Walnut	40–50	Does not tolerate wet soils. Nuts are easier to shell than black walnut.	E, C (W)
Quercus acutissima	Sawtooth Oak	30–40	Marginally hardy in northwest Kansas until established and may develop chlorosis in highly alkaline soils. Tolerates clay soils and has few pests. Yellow in fall. Fast-growing oak.	S
Quercus bicolor	Swamp White Oak	40–50	Tolerates dry soil but prefers moist, acid sites. Yellow to red in fall. May develop iron chlorosis in alkaline soils of central and western Kansas.	E, C
Quercus buckleyi	Buckley's Oak	25–35	Similar and often confused with <i>Q. texana</i> , but smaller. Native to central and west Texas. Tolerant of high pH soils. Good red fall color on some seedlings.	S
Quercus cerris	Turkey Oak	40–50	Oblong-rounded form. Small leaves are deeply cut, giving the tree a fine texture. Blocky plates give the bark an interesting and unique character. Grows well in clay soils.	E, C
Quercus imbricaria	Shingle Oak	40–50	Red foliage in spring that changes to glossy green in summer and brown in fall and winter. Tolerates a wide range of soils and has few pests. Even brown leaves remain throughout the winter. Could be used as a windbreak plant.	E, C
Quercus phellos	Willow Oak	30–40	Narrow leaves. Easier to transplant than other oaks. Prefers moist, well-drained, acid soil. Yellow-red-brown in fall.	E, C
Quercus robur	English Oak	50–65	Rounded form that is yellow-brown in fall. Tolerant of varying soil pH levels. Powdery mildew can be a problem, so select resistant cultivars.	E, C (W)

<sup>&</sup>lt;sup>1</sup>Area of Kansas that the tree would grow best in: E=eastern, C=central, W=western, S=statewide

Table 3. Large trees: 40 to 60 feet at maturity (continued)

Botanical name or cultivar	Common name	Width (feet)	Comments	Area
Crimschmidt	Crimson Spire Oak	15	Q. alba and Q. robur hybrid that is mildew resistant. Good reddish fall color with columnar growth habit.	E, C (W)
Fastigiata	Upright English Oak	10–15	Columnar form.	E, C (W)
Quercus texana	Texas Red Oak or Nuttall Oak	35–45	Still may see listed as <i>Q. nuttallii</i> . Native to regions with high soil pH, but can tolerate a range of pH levels. Red/purple new growth and red fall color. Currently being evaluated across Kansas, but should be a good landscape oak.	S
Tilia americana	American Linden (Basswood)	35–40	Fragrant, creamy flowers in June that attract bees. Yellow in fall. Grows best in rich, moist soil that is protected from hot winds.	E, C (W)
T. americana x euchlora Redmond	Redmond Linden	25–30	Symmetrical pyramidal growth habit. Large leaves give it a coarse-textured appearance.	E, C (W)
Tilia cordata Greenspire	Greenspire Linden	25–30	Symmetrical pyramidal habit with a good formal appearance in the landscape. Dark green foliage with pleasant, fragrant flowers.	E, C
Ulmus Frontier	Frontier Elm	25–35	Hybrid of <i>U. carpinifolia</i> and <i>U. parvifolia</i> . Resistant to elm leaf beetle and good heat and drought resistance. New growing tips are red/purple. Burgundy in fall.	S
Ulmus Morton Plainsman	Vanguard Elm	35–40	Hybrid of <i>U. japonica</i> and <i>U. pumila</i> . Upright-vase shape with waxy, lustrous leaves. Performs well in the Great Plains.	S
Ulmus parvifolia	Lacebark Elm	35–40	Excellent, tough, versatile shade tree with few pests and good resistance to Dutch elm disease and leaf beetles. Showy bark. Can become weedy. Numerous cultivars available, so more popular clones are listed.	S
Emer I	Athena Elm	30–40	Good leaf characteristics and broad spreading with a tight canopy.	S
Emer II	Allee Elm	30–40	Tall, upright-arching habit. Best bark characteristics of the lacebark elms with beautiful, exfoliating bark with mottled orange underneath.	S
Emerald Prairie		30–40	John C. Pair Horticultural Center introduction with upright vase-shaped growth habit. Dark green foliage with excellent resistance to elm leaf black spot.	S
UPMTF	Bosque Elm	30–40	Tight upright growth habit with dark-green foliage. Quickly becoming popular.	S
Ulmus wilsoniana Prospector	Prospector Elm	30–40	Broad vase shape with dark-green leaves. Good resistance to Dutch elm disease, elm yellows and elm leaf beetles. Adaptable.	S
Zelkova serrata	Japanese Zelkova	35–45	Elm-like shade tree with slower growth and yellow-red-brown color in fall. Cultivars selected for narrow upright growth habit, but seedling Zelkova may have better branch structure to hold up to snow and ice.	S
Green Vase		25–35	Upright arching vase shape. Orange in fall.	S
Halka		30–40	Fast-growing cultivar with wide-spreading branches. Yellow in fall.	S
Musashino		12–15	Very narrow, so use where space is limited.	S
Village Green		35–45	Fast growing with wine-red fall foliage.	S

<sup>&</sup>lt;sup>1</sup>Area of Kansas that the tree would grow best in: E=eastern, C=central, W=western, S=statewide

Table 3. Very large trees: More than 60 feet at maturity

Botanical name or cultivar	Common name	Width (feet)	Comments	Area
Acer saccharinum	Silver Maple	40–50	Fast growing and subject to breakage and iron chlorosis in alkaline soils. Invasive surface roots. Yellowish or no color in fall. Overplanted in many areas. Think twice before planting this tree.	S
Silver Queen		35–40	Same as A. saccharinum, but seedless.	S
Skinneri or Skinner		35–40	Similar to the species, but deeply dissected (cutleaf) foliage and branches more horizontal.	S
Carya illinoensis	Pecan	40–60	Good shade tree that is yellow in fall. Prefers moist soil. Cultivars available for nut production. Webworm can be a problem.	E, C
Carya laciniosa	Shellbark Hickory	40–50	Peeling bark. Difficult to transplant due to long taproot. Tolerates wet sites. Yellow in fall.	Е
Carya ovata	Shagbark Hickory	40–50	Yellow-gold in fall. Peeling, shaggy bark. Difficult to transplant.	Е
Juglans nigra	Black Walnut	50–60	For large areas. Can be messy because of fruit. Yellow in fall. Cultivars available for nut production. Large taproot. Walnut toxicity can cause problems for nearby landscape and garden plants.	E, C (W)
Liquidambar styraciflua	Sweetgum	40–50	Pyramidal form that needs moist, acid soil. Spiny fruits and yellow-red-purple color in fall.	E, C
Clydesform	Emerald Sentinel Sweetgum	10–15	Pyramidal to columnar form with good foliage. Could be a good urban tree.	E, C
Goduzam	Gold Dust Sweetgum	30–40	Typical sweetgum growth habit. Green leaves flecked with gold variegation. Interesting color in fall with some pinks. Almost the same as Variegata.	E, C
Moraine		25–35	Excellent pyramidal growth habit with dark green foliage that is an excellent burgundy to red in fall. Cold hardy. Overall good selection of Sweetgum.	E, C
Rotundiloba		20–30	Pyramidal growth habit. Rounded lobes on the leaves with varying colors in fall – typically orange to purple. Fruitless. Hardiness may be a problems in northern Kansas. Has grown successfully in Wichita for nearly 10 years. Worth trying.	E, C
Ward	Cherokee Sweetgum		Hardy selection that has been nearly fruitless. Good burgundy to red with some yellow in fall. Corky bark at a young age.	E, C
Liriodendron tulipifera	Tuliptree	35–45	Too large for small lots or as a street tree. Yellow in fall. Excellent specimen tree if given space and deep, moist, well-drained soil.	E
Arnold		15	Outstanding fastigiate form from the Arnold Arboretum; holds its shape even at maturity.	Е
Aureomarginatum		35–45	Typical of the species other than the yellow to green-yellow variegated margins on the leaves.	Е
Platanus x acerifolia	London Plantree	50–65	Ornate, peeling, creamy, green bark. Less susceptible to anthracnose disease than sycamore. Yellow-brown in fall. Prefers moist, rich soil. Strong branches that stand up to snow and ice.	E, C
Bloodgood		40–50	Resistant to anthrancnose disease.	E, C
Yarwood		35–45	Tight pyramidal growth. Good exfoliating bark, very large leaves and good disease resistance. Needs to be tested in Kansas for leaf tatter before widespread planting.	E, C
Populus deltoides	Eastern Cottonwood	50–60	Fast growth. Prefers moist soil. Yellow in fall. Reserve for large spaces away from buildings. Plant male (cottonless) types. State tree of Kansas. After 15 years of cottonwood evaluation at the John C. Pair Horticultural Center, the following cultivars have stood out.	S

<sup>&</sup>lt;sup>1</sup>Area of Kansas that the tree would grow best in: E=eastern, C=central, W=western, S=statewide

Table 3. Very large trees: More than 60 feet at maturity (continued)

Botanical name or cultivar	Common name	Width (feet)	Comments	Area
Lydick		40–50	Although origin and correct taxonomy may be confused, this female clone has continued to produce large trees with good form that have stood up to years of testing.	S
McHenry		50–60	With no official cultivar name, it is known by the name of the individual who has propagated and promoted this plant (Marshall McHenry). The parent plant is a massive male cottonwood with superior form. In the Wichita trials, this selection has grown faster and with better caliper than all other clones.	S
Quercus alba	White Oak	40–50	Leaves resemble English oak, but white oak is resistant to powdery mildew.  Massive, stately tree that will be enjoyed for generations. Purple to red in fall.  Prefers moist, acid soil.	E (C)
Quercus macrocarpa	Bur Oak	50–70	Long-lived shade tree for large spaces. Yellow-brown in fall. Adapts to various soils.	S
Quercus palustris	Pin Oak	30–40	Recommended for eastern Kansas due to iron chlorosis in alkaline soils in the central and western Kansas. Strongly pyramidal form. Fall color is brilliant red in the east.	Е
Quercus rubra	Red Oak	40–50	Red-orange in fall and dark green, glossy, summer foliage. Good substitute for pin oak. Avoid poorly drained clay soils and protect from hot winds.	S
Quercus shumardii	Shumard Oak	40–50	Excellent red in fall. Tolerates alkaline soil. Looks similar to pin oak, but has a more spreading habit.	S
Taxodium ascendens	Pondcypress	20–30	Similar to <i>T. distichum</i> , but branchlets are upright and gives the tree a slightly different look. Tolerates of a variety of soil conditions.	E, C
Nutans		20–30	Short, horizontal branches.	E, C
Prairie Sentinel		10–15	Tall and narrow with fine-textured foliage. Nice specimen.	E, C
Taxodium distichum	Baldcypress	35–50	Stately, pyramidal form. Thrives in wet sites; although it looks like a conifer, its green leaves turn orange-brown before dropping in fall.	E, C
Cascade Falls		10	A weeping form that makes an outstanding specimen in any landscape.	E, C
Frio or Frio River		35–50	This seed-grown provenance from west Texas is being promoted by an Oklahoma nursery operator. Trees are completely green in soils with 8.0 pH. Currently being evaluated in western Kansas. Cold hardiness is unknown at this time. Promising plant for the future.	(S)
Ulmus americana	American Elm	50–70	American elms are back. Below are a couple cultivars that are resistant to Dutch elm disease.	S
New Harmony		50–60	The newest introduction. More rounded than vase shaped. Resistant to Dutch elm disease and elm yellows.	S
Valley Forge		70	Most resistant to Dutch elm disease. Rapid growth can be unruly when young, but eventually matures to a broad, vase-shaped tree.	S
Princeton		50	Excellent Dutch elm disease resistance. Good, dark green foliage in a tight vase-shaped tree.	S
U. japonica x wilsoniana Morton	Accolade Elm	50–60	Large tree with upright-arching branches providing a high canopy. Excellent disease and insect resistance.	S
Ulmus Patriot	Patriot Elm	40	A complex hybrid with a vigorous, upright growth habit. Lustrous, dark green leaves and excellent disease resistance. One of the best perfoming elms at the John C. Pair Horticultural Center.	S

<sup>&</sup>lt;sup>1</sup>Area of Kansas that the tree would grow best in: E=eastern, C=central, W=western, S=statewide

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