

## Small to Medium Trees Recommended for Missouri

### LATIN NAME

*Aesculus pavia*

*Betula nigra*

*Cercis canadensis*

*Cladrastis kentukea*

*Cornus florida*

*Koelreuteria paniculata*

*Nyssa sylvatica*

*Prunus serotina*

*Salix nigra*

*Sassafras albidum*

### COMMON NAME

red buckeye

river birch

eastern redbud

yellowwood

flowering dogwood

golden rain tree

black gum

black or wild cherry

black willow

sassafras

The trees in this section are considered by the Missouri Department of Conservation to be desirable species. They should grow well in Missouri when planted properly under the right conditions.



**palmately compound**

**5 to 7 leaflets**



**long panicles**



**seed capsules splitting open**



# **Aesculus**



**MO Native:** *Aesculus pavia*

**Common name:** red buckeye



es'-kU-lus

**Height:** 12 to 15 feet

**Spread:** 12 to 15 feet

**Bark:** splotchy gray-brown, initially smooth but with size will develop scaly patches

**Flowers:** showy, erect, 4-10" long panicles of red to orange-red, narrow-tubular flowers

**Fruits:** smooth, light brown, globular seed capsules encase 1-3 shiny seeds called buckeyes

**Leaves:** opposite, palmately compound leaves, with usually 5 – 7 leaflets

**Disease:** leaf blotch

**Insects:** no serious insect problems

1. Leaves are opposite, palmately compound with usually 5 – 7 leaflets
2. Name derived from resemblance of seed to the eye of a deer (buck)
3. Drops its leaves by the end of summer

Latin for an oak with edible acorns (caution - many are poisonous.) Specific epithet honors 17th century Dutch botanist Peter Paaw (Petrus Pavius).





**doubly toothed margins**



**exfoliating bark**



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**brownish male catkins**



**greenish  
female catkins**

**Betula**



**MO Native:** *Betula nigra*

**Common name:** river birch



bet'-U-la

**Height:** 40 to 70 feet

**Spread:** 40 to 60 feet

**Bark:** salmon-pink to reddish brown bark exfoliates to reveal lighter inner bark

**Flowers:** monoecious flowers appear in drooping, brownish male catkins & smaller, upright, greenish female catkins

**Fruit:** non-showy, ovate, wingless drupes

**Leaves:** alternate, diamond-shaped with doubly toothed margins

**Disease:** one of the most disease-free birches

**Insects:** bronze birch borer

1. Usually multi-trunked tree which is often slightly leaning & forked tree
2. Leaves are leathery, diamond-shaped with doubly toothed margins
3. Salmon-pink to reddish brown bark exfoliates to reveal lighter inner bark

Genus name comes from the Latin name for birch. Specific epithet means black.



**pea-like, rose-purple flowers**



**bean-like dry seedpods**



**alternate, simple, wide, heart shaped**

## **Cercis**



**MO Native:** *Cercis canadensis*

**Common Name:** eastern redbud



ser'-sis

**Height:** 20 to 30 feet

**Spread:** 25 to 35 feet

**Bark:** thin, scaly, reddish-brown to dark gray

**Flowers:** pink pea-like flowers

**Fruit:** flattened leguminous bean-like dry seedpods about 2-3" long

**Leaves:** alternate, simple, wide, heart-shaped

**Disease:** verticillium wilt, canker

**Insects:** leaf hoppers, caterpillars, scale

1. Leaves are alternate, simple, wide, heart-shaped
2. Pea-like rose-purple flowers which bloom profusely on bare branches
3. Flattened leguminous bean-like dry seedpods about 2-3" long

Genus name comes from the Greek word *kerkis* meaning weaver's shuttle in reference to the resemblance of each seed pod to a weaver's shuttle. Specific epithet is in reference to Canada (southern Ontario) being part of the native range of this tree.

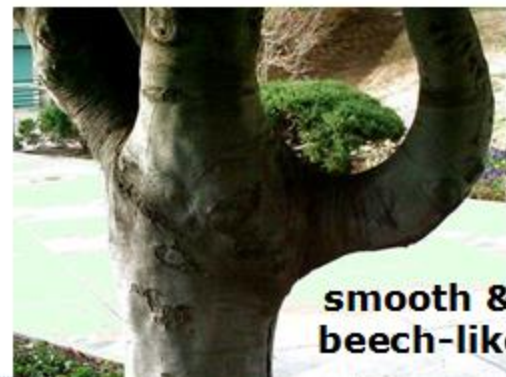




**drooping terminal  
panicles**



**alternate, pinnately compound**



**smooth &  
beech-like**

# ***Cladrastis***



**MO Native:** *Cladrastis kentukea*

**Common Name:** yellowwood



kla-dras'-tis

**Height:** 30 to 50 feet

**Spread:** 40 to 55 feet

**Bark:** smooth and beech-like, light gray

**Flowers:** intensely fragrant, wisteria-like, white flowers in large, drooping, terminal panicles

**Fruit:** brown flat pods about 2.5 -5" long

**Leaves:** alternate, pinnately compound leaves (usually with 7-11 leaflets)

**Disease:** no serious disease problems

**Insects:** no serious insect problems

1. Leaves are alternate, pinnately compound but individual leaflets sub-opposite
2. Narrow branch angles make the tree prone to splitting
3. Trees may not flower for first 8-10 years

Greek "kladros" (branch) & "thraustos or thrastos" (fragile) for fragile branches / from Kentucky.



**opposite & simple, oval to ovate**



**small, square plates**



**4 very showy, large, white (occasionally pink) bracts**



**bright red fruits**

# **Cornus**



**MO Native:** *Cornus florida*

**Common name:** flowering dogwood



kor'-nus

**Height:** 15 to 30 feet

**Spread:** 15 to 30 feet

**Bark:** reddish brown, broken into small square plates

**Flowers:** monoecious; very small & inconspicuous tight cluster but surrounded by 4 very showy, large, white (occasionally pink) bracts

**Fruits:** bright red fruits (poisonous to humans, but loved by birds)

**Leaves:** opposite & simple, oval to ovate shape

**Disease:** weakened trees susceptible to borers

**Insects:** dogwood anthracnose borers

1. Leaves are opposite & simple, oval to ovate shape
2. Bright red fruit is poisonous
3. Flowers small & inconspicuous tight cluster but surrounded by 4 large, white (occasionally pink) bracts

*Cornus* is from the Latin word *cornu* "a horn," in reference to the hard wood; *florida* means flowering.





**alternate, pinnate or  
bipinnate, compound**



**flowers in terminal, panicles**

**papery seed capsules**



# **Koelreuteria**



***Koelreuteria paniculata***

**Common name:** golden rain tree



kel-rO-tE'-ri-a

**Height:** 30 to 40 feet

**Spread:** 30 to 40 feet

**Bark:** color is a light gray-brown older branches and trunk with significant ridges and furrows

**Flowers:** bright yellow flowers (1/2" wide) appear in early summer in long, terminal, panicles

**Fruit:** brown, papery seed capsules which somewhat resemble Chinese lanterns

**Leaves:** alternate, pinnate or bipinnate, compound, each leaf having 7-17 irregularly lobed leaflets

**Disease:** root rot, leaf spot, canker

**Insects:** no serious insect problems

1. Leaves are alternate, pinnate or bipinnate, compound
2. Fruit is brown, papery seed capsules which somewhat resemble Chinese lanterns
3. Leaves pinkish bronze to purplish in spring, bright green in summer, & yellow in fall

Named for Joseph Gottlieb Koelreuter, 18th century German professor of natural history. Paniculata means flowers in panicles.





**oval, 1/2"  
long fruits  
bluish-black**

**alternate, simple, obovate to elliptic**



**female flowers in clusters**

# Nyssa



MO Native: *Nyssa sylvatica*

Common name: **black gum**



nis'-sa

**Height:** 30 to 50 feet

**Spread:** 20 to 30 feet

**Bark:** dark gray-brown bark color, with irregular ridges, block-like with an "alligator hide" appearance

**Flowers:** primarily dioecious, female flowers light green, in clusters hanging from slender stalks; male in dense heads

**Fruit:** oval, 1/2" long fruits bluish-black

**Leaves:** alternate, simple, obovate to elliptic, entire to slightly toothed leaves (to 5" long)

**Disease:** leaf spots, canker

**Insects:** leaf miner, scale

1. Leaves are alternate, simple, obovate to elliptic
2. Fruit is oval, 1/2" long fruits bluish-black
3. Female flowers are light green, in clusters hanging from slender stalks

*Nyssa* is from Mount Nyssa in Asia Minor, the legendary mythical home of the naiads, or water nymphs, who brought fruitfulness to plants, herbs, & mortals; *sylvatica* is from the Latin *sylva* (a forest) referring to where black gum is found.



**alternate, simple, narrow oblong-ovate to lanceolate, glossy**



**flowers in slender pendulous clusters**

**drooping clusters**



**lenticels**

# **Prunus**



**MO Native:** *Prunus serotina*

**Common Name:** black or wild cherry



proo'-nus

**Height:** 50 to 80 feet

**Spread:** 30 to 60 feet

**Bark:** dark grey to black with many lenticels

**Flowers:** fragrant white flowers in slender pendulous clusters (racemes to 6" long)

**Fruit:** drooping clusters of small red that ripen to purple-black cherries

**Leaves:** alternate, simple, narrow oblong-ovate to lanceolate, glossy

**Disease:** leaf spot, die back, leaf curl, powdery mildew, root rot & fireblight

**Insects:** aphids, scale, borers, leafhoppers, caterpillars, tent caterpillars & Japanese beetles

1. Leaves are alternate, simple, narrow oblong-ovate to lanceolate & glossy
2. Fragrant white flowers in slender pendulous clusters
3. Fruits are bitter & inedible fresh off the tree but can be used to make jams, jellies, & to flavor certain liquors

*Prunus* is the Latin name of European plum; *serotina* is Latin for "late-flowering."





**lanceolate in shape**



**green flowers  
born on catkins**

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**scaly ridges & deep furrows**



**cottony seeds**

**Salix**



**MO Native:** *Salix nigra*

**Common name:** black willow



sA'-liks

**Height:** 30 to 60 feet

**Spread:** 30 to 60 feet

**Bark:** brown to gray-black, with thick, somewhat scaly ridges & deep furrows

**Flowers:** dioecious; male & female flowers are tiny, green, borne on catkins, 1 to 3 inches long

**Fruit:** cone shaped capsules that contain many small, cottony seeds, born on catkins

**Leaves:** alternate, simple, pinnately veined, lanceolate in shape, finely toothed

**Disease:** blights, leaf spots

**Insects:** willow sawfly

1. Leaves alternate, simple, lanceolate in shape
2. Cone shaped capsules that contain many small cottony seeds
3. Other willow species have similarly shaped leaves, but are whitish or silky beneath

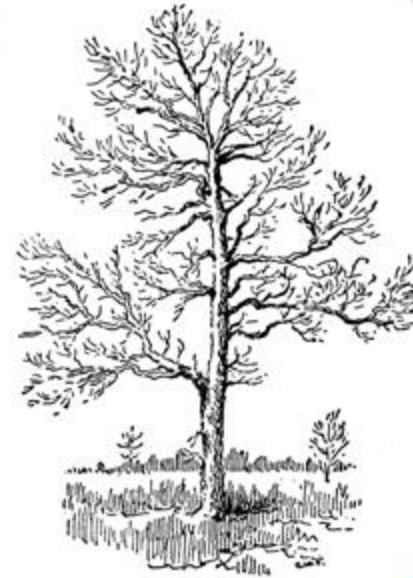
*Salix* is an ancient Latin name for willows. Specific epithet from Latin means black in reference to the black tree bark.



**ovoid,  
fleshy  
drupes**



**coarsely ridged & furrowed**



**alternate, ovate, mitten-shaped and three-lobed**



**male & female  
flowers**

# Sassafras



*Sassafras albidum*

**Common name:** sassafras



sas'-a-fras

**Height:** 30 to 60 feet

**Spread:** 25 to 40 feet

**Bark:** brown, with cinnamon-brown inner bark, becoming coarsely ridged & furrowed

**Flowers:** dioecious; small but quite showy, both male & females are bright yellow-green, born in racemes

**Fruit:** dark shiny blue, ovoid, fleshy drupes in a red cup attached to a red stalks

**Leaves:** alternate, simple, three shapes (ovate, mitten-shaped and three-lobed) are bright green above & glaucous (*albidum* meaning white) below

**Disease:** leaf spots, mildew

**Insects:** sassafras weevil, scale

1. Male & female flowers born in bright yellow-green racemes
2. Leaves are alternate, simple, three shapes (ovate, mitten-shaped and three-lobed)
3. Fruits is ovoid, fleshy drupe in red cups attached to red stalks

American Indian name or from Spanish "saxafrax" / white (leaf undersides.)