

***Cercis canadensis*: Eastern Redbud¹**

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Introduction

The state tree of Oklahoma, Eastern Redbud is a moderate to rapid-grower when young, reaching a height of 20 to 30 feet. Thirty-year-old specimens are rare, but they can reach 35 feet in height forming a rounded vase. Trees of this size are often found on moist sites. The splendid purple-pink flowers appear all over the tree in spring, just before the leaves emerge. Eastern Redbud has an irregular growth habit when young but forms a graceful flat-topped vase-shape as it gets older. The tree usually branches low on the trunk, and if left intact forms a graceful multitrunked habit. Be sure to avoid weak forks by pruning to reduce the size of lateral branches and save those which form a 'U'-shaped crotch, not a 'V'. Keep them less than half the diameter of the main trunk to increase longevity of the tree. Do not allow multiple trunks to grow with tight crotches, instead space branches about 6 to 10 inches apart along a main trunk. Yellow (although somewhat variable and unreliable) fall color and tolerance to partial shade make this a suitable, attractive tree for understory or specimen planting. Best not used extensively as a street tree due to low disease resistance and short life, but is nice in commercial and residential landscapes. Plant in a shrub border for a spring and fall color display.



Figure 1. Full Form—*Cercis canadensis*: Eastern redbud

General Information

Scientific name: *Cercis canadensis*

Pronunciation: SER-sis kan-uh-DEN-sis

Common name(s): Eastern Redbud

Family: *Fabaceae*

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USDA hardiness zones: 4B through 9A (Figure 2)

Origin: native to the eastern half of the United States and northern Mexico

UF/IFAS Invasive Assessment Status: native

Uses: tree lawn 3–4 feet wide; tree lawn 4–6 feet wide; tree lawn > 6 ft wide; street without sidewalk; sidewalk cutout (tree pit); container or planter; parking lot island < 100 sq ft; parking lot island 100–200 sq ft; parking lot island > 200 sq ft; deck or patio; shade; specimen; reclamation; highway median

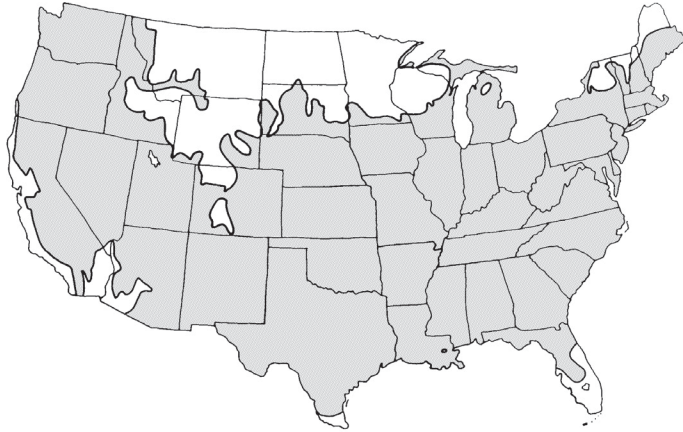


Figure 2. Range

Description

Height: 20 to 30 feet

Spread: 15 to 25 feet

Crown uniformity: irregular

Crown shape: vase, round

Crown density: moderate

Growth rate: fast

Texture: coarse

Foliage

Leaf arrangement: alternate

Leaf type: simple

Leaf margin: entire

Leaf shape: heart-shaped

Leaf venation: palmate, reticulate, brachidodrome, pinnate

Leaf type and persistence: deciduous

Leaf blade length: 3 to 5 inches

Leaf color: light green on top, paler green underneath

Fall color: yellow

Fall characteristic: showy

Flower

Flower color: light pink to dark magenta

Flower characteristics: very showy; emerges in clusters along stems

Flowering: early spring, before new growth



Figure 3. Leaf—*Cercis canadensis*: Eastern redbud



Figure 4. Flower—*Cercis canadensis*: Eastern redbud

Fruit

Fruit shape: pod or pod-like

Fruit length: 2 to 4 inches

Fruit covering: dry or hard

Fruit color: green; turn brown with maturity

Fruit characteristics: does not attract wildlife; showy; fruit/leaves not a litter problem

Fruiting: late summer



Figure 5. Fruit—*Cercis canadensis*: Eastern redbud

Trunk and Branches

Trunk/branches: branches droop; not showy; can be trained to one trunk; no thorns

Bark: brown and smooth, becoming dark gray or brown, with splits or fissures that reveal orange crack with maturity

Pruning requirement: needed for strong structure

Breakage: susceptible to breakage

Current year twig color: brown

Current year twig thickness: medium

Wood specific gravity: unknown



Figure 6. Bark, Young—*Cercis canadensis*: Eastern redbud



Figure 7. Bark, Mature—*Cercis canadensis*: Eastern redbud

Credits: Gritta Hasing

Culture

Light requirement: full sun, partial sun or partial shade

Soil tolerances: clay; sand; loam; alkaline; acidic; occasionally wet; well-drained

Drought tolerance: high

Aerosol salt tolerance: none

Other

Roots: not a problem

Winter interest: no

Outstanding tree: no

Ozone sensitivity: sensitive

Verticillium wilt susceptibility: susceptible

Pest resistance: low resistance to pests/diseases

Use and Management

Eastern Redbuds grow well in full sun in the northern part of its range but will benefit from some shade in the southern zones, particularly in the lower mid-west where summers are hot. Best growth occurs in a light, rich, moist soil but Eastern Redbud adapts well to a variety of soil including sandy or alkaline. Trees look better when they receive some irrigation in summer dry spells. Its native habitat ranges from stream bank to dry ridge, demonstrating its adaptability. Trees are sold as single or multistemmed. Young trees are easiest to transplant and survive best when planted in the spring or fall. Containerized trees can be planted anytime. The beans provide food for some birds. Trees are

short-lived but provide a wonderful show in the spring and fall.

Several cultivars of Eastern Redbud may be seen: forma *alba*—white flowers, blooms about a week later; 'Pink Charm'—flowers pink; 'Pinkbud'—flowers pink; 'Purple Leaf'—young foliage purple; 'Silver Cloud'—leaves variegated with white; 'Flame'—more erect branching, flowers double, blooms later, sterile so no seed pods form. 'Forest Pansy' is a particularly attractive cultivar with purple-red leaves in the spring, but color fades to green in the summer in the south. *Cercis canadensis* var. *texensis* 'Texas White' and *Cercis reniformis* 'Oklahoma' have far superior foliage and make wonderful substitutes for Eastern Redbud, particularly in non-irrigated areas. These are also better for central and western Oklahoma and Texas, as is the Mexican Redbud.

Cercis are best propagated by seed. Use ripe seed to plant directly, or, if seed has been stored, stratification is necessary before sowing in a greenhouse. Cultivars can be propagated by grafting onto seedlings, or by summer cuttings under mist or in a greenhouse.

Pests

Borers attack the trunk of older and stressed trees. Keep the plant vigorous.

Scale insects can usually be controlled with horticultural sprays.

Webworm can defoliate parts of the tree in summer and fall.

Diseases

Canker is the biggest problem with Eastern Redbud.

Dieback begins as a canker on a branch. The cankers, at first small and sunken, enlarge to girdle the branch. Bark in the canker turns black and a crack forms between diseased and healthy bark. The fungus enters through wounds or dead and dying branches. Once girdled, the part of the stem beyond the canker wilts and dies. There is no chemical control. Prune out diseased branches.

Leaf spots can be a problem during wet weather. Since the disease is rarely serious, no chemical controls are suggested.

Verticillium wilt attacks and kills Eastern Redbud.

Reference

Koeser, A. K., Hasing, G., Friedman, M. H., and Irving, R. B. 2015. *Trees: North & Central Florida*. Gainesville: University of Florida Institute of Food and Agricultural Sciences.