



Juniperus virginiana Eastern Redcedar¹

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INTRODUCTION

Redcedar is an evergreen growing 40 to 50 feet tall in an oval, columnar, or pyramidal form (very diverse) and spreading 8 to 15 feet when given a sunny location (Fig. 1). It develops a brownish tint in winter in the north and is sometimes used in windbreaks or screens. The fruit is a blue berry on female trees and is ornamental when produced in quantity. Birds devour the fruit and 'plant' it along farm fences and in old abandoned fields. Some botanists do not separate *J. virginiana* from *silicicola*.

GENERAL INFORMATION

Scientific name: *Juniperus virginiana*

Pronunciation: joo-NIP-er-us ver-jin-ee-AY-nuh

Common name(s): Eastern Redcedar

Family: *Cupressaceae*

USDA hardiness zones: 2 through 9 (Fig. 2)

Origin: native to North America

Uses: Bonsai; wide tree lawns (>6 feet wide); medium-sized tree lawns (4-6 feet wide); recommended for buffer strips around parking lots or for median strip plantings in the highway; reclamation plant; screen; residential street tree; Christmas tree; tree has been successfully grown in urban areas where air pollution, poor drainage, compacted soil, and/or drought are common

Availability: generally available in many areas within its hardiness range

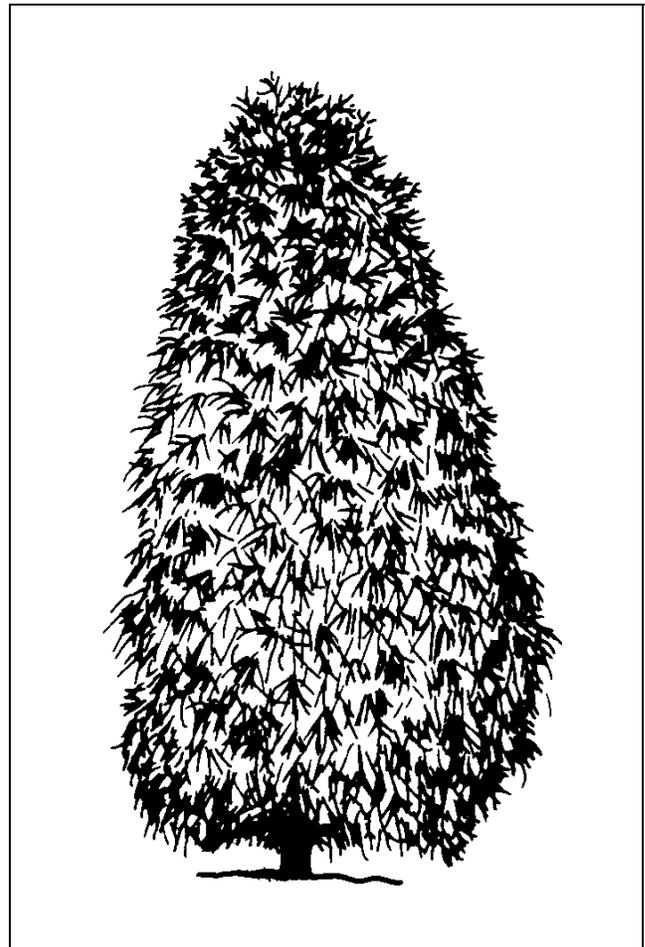


Figure 1. Middle-aged Eastern Redcedar.

DESCRIPTION

Height: 40 to 50 feet

Spread: 10 to 20 feet

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Figure 2. Shaded area represents potential planting range.

Crown uniformity: symmetrical canopy with a regular (or smooth) outline, and individuals have more or less identical crown forms

Crown shape: columnar; oval; pyramidal

Crown density: moderate

Growth rate: fast

Texture: fine

Foliage

Leaf arrangement: opposite/subopposite; whorled (Fig. 3)

Leaf type: simple

Leaf margin: entire; terminal spine

Leaf shape: awl-like; scale-like

Leaf venation: none, or difficult to see

Leaf type and persistence: evergreen

Leaf blade length: less than 2 inches

Leaf color: green

Fall color: no fall color change

Fall characteristic: not showy

Flower

Flower color: green; yellow

Flower characteristics: inconspicuous and not showy

Fruit

Fruit shape: round

Fruit length: < .5 inch

Fruit covering: fleshy

Fruit color: blue; purple

Fruit characteristics: attracts birds; no significant litter problem; persistent on the tree; showy

Trunk and Branches

Trunk/bark/branches: droop as the tree grows, and will require pruning for vehicular or pedestrian clearance beneath the canopy; showy trunk; should be grown with a single leader; no thorns

Pruning requirement: needs little pruning to develop a strong structure

Breakage: susceptible to breakage either at the crotch due to poor collar formation, or the wood itself is weak and tends to break

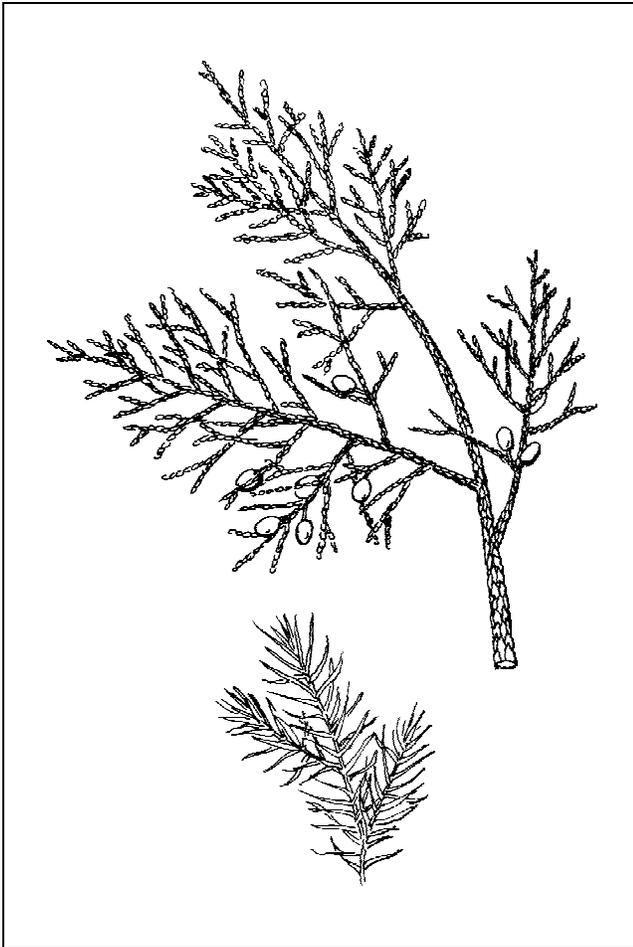


Figure 3. Foliage of Eastern Redcedar.

Current year twig color: brown; green

Current year twig thickness: thin

Wood specific gravity: 0.47

Culture

Light requirement: tree grows in part shade/part sun; tree grows in full sun

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

Drought tolerance: high

Aerosol salt tolerance: high

Soil salt tolerance: moderate

Other

Roots: surface roots are usually not a problem

Winter interest: no special winter interest

Outstanding tree: not particularly outstanding

Invasive potential: little, if any, potential at this time

Ozone sensitivity: tolerant

Verticillium wilt susceptibility: not known to be susceptible

Pest resistance: no pests are normally seen on the tree

USE AND MANAGEMENT

The dense growth and attractive foliage make Eastern Redcedar a favorite for windbreaks, screens, and wildlife-cover for large-scale landscapes. Its high salt-tolerance makes it ideal for seaside locations. Redcedar can make a nice Christmas tree, and the fragrant wood is popular for repelling insects. Although not currently used often as a street tree, its wood is strong, the foliage is clean, and the fruit is small making it a suitable candidate. There are some nice examples of street tree use in southern cities. With proper pruning to remove lower branches, it should adapt well to street-scapes.

Planted in full sun or partial shade, Eastern Redcedar will easily grow on a variety of soils, including clay, but will not do well on soils kept continually moist. Growth may be poor in landscapes which are over-irrigated. Plants are difficult to transplant due to a coarse root system, except when quite small. Water until well-established and then forget about the tree. It performs admirably with no care, even on alkaline soil and along the coast. Usually insects and diseases are not a problem if grown in the full sun. There may be local restrictions on planting this tree near apple orchards because it is the alternate host for cedar-apple rust.

Some nurseries carry a cultivar or two of redcedar.

Cultivars include: 'Burkii' - pyramidal, blue foliage, 15 to 25 feet tall; 'Canaertii' - compact, pyramidal, good fruit production, fairly common in Texas; 'Hillspire' - (cupressifolia) - good green color; 'Elegantissima' - Goldtip Redcedar - branchlets with yellow tips, less than 20 feet tall; 'Filifera' - pyramidal, branchlets divided, foliage gray green; 'Glauca' - Silver Redcedar - narrow, columnar, 15 to 20 feet tall, silvery blue foliage especially in spring; 'Ketterii' is commonly available in the mid-west, is more open with spaces between branches at the top of the tree, pyramidal; 'Manhattan Blue' - compact, 20 feet tall, pyramidal, foliage bluish green; 'Pendula' - Weeping Redcedar - branchlets pendulous, to 40 feet tall; 'Pyramidalis Dundee' - pyramidal, purplish green in winter; 'Skyrocket' - silver-blue foliage, narrow columnar form.

Pests

Usually none are serious.

Bagworm caterpillars occasionally web foliage and debris together to make bags up to two inches long. The insects live in the bags and emerge to feed on the foliage. Use sprays of *Bacillus thuringiensis*. The insects can also be picked off the plants by hand.

Juniper scale causes yellowed needles, and infected branches fail to produce new growth. The scale is round and at first white, later turning gray or black.

The Juniper webworm webs twigs and needles together, causing them to brown and die. The larva is 1/2-inch-long and is brown with darker stripes. The larvae are often in the densest part of the plant and can go unnoticed.

Mites cause stippled and bronzed foliage.

Diseases

Twig blights cause death and browning of twig tips. The diseases may progress down the stem killing the whole branch. Small lesions may be seen at the base of dead tissue. Prune out dead branch tips. Dieback from Kabatina blight appears in early spring, from Phomopsis in summer.

Three rust diseases seen most often are cedar-apple rust, hawthorn rust, and quince rust. The most common is cedar-apple rust. On Juniper the first two diseases form galls and orange jelly-like horns in spring. The horns are most likely to form following periods of rainy, warm weather. Spores formed in the horns infect the alternate host. The diseases are more serious on the alternate host than Juniper. There may be local restrictions on planting this tree near apple orchards because it is the alternate host for cedar-apple rust. A separation of a few hundred yards may help avoid the disease. Prune out the spore horns when seen in the spring. Do not plant near hawthorns, apples, or crabapples.

Junipers are not tolerant of ice coatings. Expect dieback when Junipers are covered with ice for several days. Removing the ice is impractical.