

# Eastern Red-cedar



# Eastern Red-cedar (*Juniperus virginiana*)

## General Description

A small tree with a short trunk and irregular, pyramidal crown native to the eastern United States. Dwarf or compact forms of this juniper are used as ornamentals. The largest tree in North Dakota is 51 feet tall with a canopy spread of 30 feet.

Leaves and Buds

Bud Arrangement - Continuous.

Bud Color - Same as leaves, hard to distinguish from leaves.

Bud Size - 1/8 inch.

Leaf Type and Shape - Simple scale and awl-like leaves.

Leaf Margins - Sawtooth serrations

Leaf Surface - Prickly.

Leaf Length - Variable lengths, indeterminate growth, juvenile leaves in pairs 1/5 to 1/4 inch, ending in a spiny point.

Leaf Width - 1/16 inch.

Leaf Color - Concave and glaucous above, green and convex below.

Flowers and Fruits

Flower Type - Unisexual, usually dioecious.

Flower Color - Female, green; male, yellow-brown.

Fruit Type - Cones, globose or ovoid, and deeply pitted, typical juniper "berry", mature in one year; 1 to 3 ovate seeds.

Fruit Color - Shiny brown seeds in dark blue, berry-like cones with heavy glaucous coating.

Form

Growth Habit - Fairly dense pyramidal when young, much more open to slightly pendulous when mature.

Texture - Medium, summer and winter.

Crown Height - 30 to 45 feet.

Crown Width - 15 to 30 feet.

Bark Color - Gray-brown, exfoliating in long strips.

Root System - Deep, penetrating taproot.

## Environmental Requirements

Soils

Soil Texture - Moist, deep loam to sand.

Soil pH - 6.0 to 8.0. Will tolerate alkaline and saline conditions.

Windbreak Suitability Group - 1, 1K, 3, 4, 4C, 5, 6D, 6G, 7, 8, 9C, 9L.

Cold Hardiness

USDA Zone 2.

Water

Drought tolerant, but prefers moist soils.

Light

Full sun. Tolerates shade only in youth.

## Uses

Conservation/Windbreaks

Small to medium evergreen for farmstead and field windbreaks.

Wildlife

Fruit matures in one season. Provides food for birds and mammals. Nesting and winter cover for a variety of birds. Browse for whitetail deer.

Agroforestry Products

Wood - Used for fence posts, cedar chests, pencils, and medicines. Heartwood is decay resistant.

Food - Berry-like cones used in alcohol products.

Medicinal - Native Americans used for coughs, head colds and dysentery.

Urban/Recreational

Good for ornamental landscaping. The species, as well as most cultivars, turn brown in the winter.

## Cultivated Varieties

Canaert Red-cedar (*Juniperus virginiana* 'Canaertii') - Dense, tufty, green colored selection. One of few cultivars to retain summer color in winter.

Taylor Juniper (*J. virginiana* 'Taylor') - A new cultivar from Nebraska with a very narrow, erect growth habit of interest for landscape use.

## Related Species

Rocky Mountain juniper (*J. scopulorum*)

## Pests

Common diseases include cedar-apple rust (Gymnosporangium) and Kabatina tip blight. Common insect pests include spider mites. Red cedars should not be planted near apple, crabapple, juneberries, or hawthorns due to increased risk of damage by Gymnosporangium rusts. Cedar oil extract of *Juniperus* species has been effective control of clothes moths.