

Rocky Mountain
Juniper



Rocky Mountain Juniper (*Juniperus scopulorum*)

General Description

A small to medium tree, typically with a dense pyramidal crown. Native to western North Dakota. Seedling plantings may exhibit a wide variety of forms. Many denser growing cultivars are used as ornamentals. The largest tree in North Dakota has a trunk circumference of 7½ 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 - Entire.

Leaf Surface - Prickly.

Leaf Length - Variable lengths, indeterminate growth, the current year's foliage is awl-shaped or scalelike, 1/4 to 1/3 inch.

Leaf Width - Variable 1/16 inch.

Leaf Color - Dark or light bluish-green, glaucous or light green, variable. Little fall or winter color change.

Flowers and Fruits

Flower Type - Unisexual, usually dioecious.

Flower Color - Female, red to green; male, yellow.

Fruit Type - Cones (typical juniper "berry"), ovoid, and deeply pitted, mature second year; 1 to 3 seeds.

Fruit Color - Shiny brown seeds in dark blue berry-like glaucous cones.

Form

Growth Habit - Variable pyramidal to narrow crowns, normally with numerous long, upward-reaching branches.

Texture - Fine, summer and winter.

Crown Height - 20 to 40 feet.

Crown Width - 12 to 20 feet.

Bark Color - Reddish-brown coloration to the underbark, shredding bark. Older bark has shallow fissures in a network of flat ridges.

Root System - Variable, shallow in moist areas, deep in dry soils.

Environmental Requirements

Soils

Soil Texture - Prefers deep moist well-drained loam, but will tolerate sandy soils.

Soil pH - 6.0 to 8.0. Tolerates salts and high pH.

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

Cold Hardiness

USDA Zone 3.

Water

Extremely drought tolerant once established, but likes moist soils.

Light
Full sun.

Uses

Conservation/Windbreaks

Small to medium evergreen for farmstead and field windbreaks. Most stress tolerant species available for conservation use.

Wildlife

Excellent for cover, nesting, and food.

Agroforestry Products

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

Food - Fruit used in alcohol products.

Medicinal - Used for cancer treatment, and colds, coughs, sore throats, diarrhea, bleeding, fevers, pneumonia, stomach aches, and topical pain reliever for arthritis. Source of pinene, a terpenoid volatile oil and source of podophyllotoxin, an antibiotic.

Urban/Recreational

Good for ornamental landscaping. Does not turn brown in winter like Eastern Red-cedar.

Cultivated Varieties

Only a selected group of cultivars are listed. There are many broad-spreading cultivars of lesser landscape value.

Blue Creeper™ Juniper (*Juniperus scopulorum* 'Monam') - A patented atypical Rocky Mountain Juniper with a low 1 to 2 feet spreading growth habit. Undoubtedly a hybrid. Excellent bluish color year round.

Cologreen Juniper (*J. scopulorum* 'Cologreen') - Semi-compact, bright green upright form.

Gray Gleam Juniper (*J. scopulorum* 'Gray Gleam') - Semi-compact upright form with silvery, gray-blue foliage.

Grizzly Bear Juniper (*J. scopulorum* 'Grizzly Bear') - Introduced by Northwest Nursery, Valley City, North Dakota. Fairly compact, upright bluish juniper which merits greater popularity for planting.

Medora Juniper (*J. scopulorum* 'Medora') - A narrow, columnar form with blue-gray, tinged green, foliage introduced at NDSU, Fargo, North Dakota. Widely grown, proven performance.

Welch Juniper (*J. scopulorum* 'Welchii') - An older, somewhat compact cultivar with upright growth, silvery to bluish-green in color.

Winter Blue Juniper (*J. scopulorum* 'Winter Blue') - Another atypical Rocky Mountain Juniper which grows as a spreader with bluish color. Undoubtedly a hybrid.

Related Species

Eastern Red-cedar (*Juniperus virginiana*)

Pests

Common diseases include cedar-apple rust (*Gymnosporangium*) and Kabatina tip blight. Common insect pests include spider mites. Junipers should not be planted near apples, crabapples, juneberries, or hawthorns due to increased risk of damage by *Gymnosporangium* rusts. Extracts of *Juniperus* species are toxic to certain insect pests.