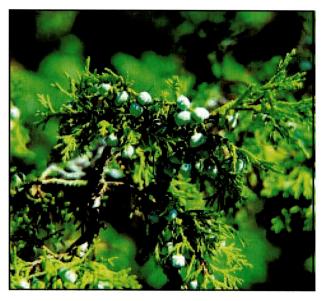
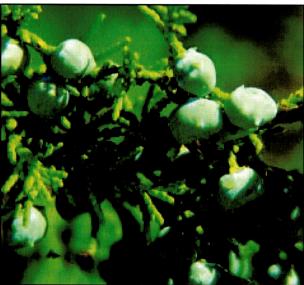


Rocky Mountain Juniper







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 CreeperTM 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.



Plant Fact Sheet

ROCKY MOUNTAIN JUNIPER

Juniperus scopulorum Sarg.
Plant Symbol = JUSC2

Contributed by: USDA NRCS Plant Materials Program



USDA NRCS Bridger Plant Materials Center

Uses

Erosion control: Plant Rocky Mountain juniper in the outer rows of multi-row plantings where it will not be overtopped by taller trees. It can be used in single-row windbreaks when a dense, medium height barrier is desired.

Wildlife: This species provides food and cover for numerous birds and mammals. Winter food and protection is particularly important for pheasant, mule deer, and whitetail deer.

Recreation and Beautification: The year-long coloration and attractiveness to wildlife makes this species useful for recreational plantings. It tends to stay green all winter.

Status

Please consult the PLANTS Web site and your State Department of Natural Resources for this plant's current status (e.g. threatened or endangered species, state noxious status, and wetland indicator values).

Description

Juniperus scopulorum Sarg., Rocky Mountain juniper, is a small evergreen tree to 35 feet, often

with an irregular crown. A native of western North America, it occurs in mixed or pure stands of open scrub woodland over Wyoming and Colorado at elevations of 5,000 to 7,500 feet, often on dry, rocky ridges. It does well in cultivation, adapted to a wide range of soils and moisture conditions, and is winter hardy, slow growing and very long lived.

Fruits blue with whitish bloom, fleshy "berries" (cones), 1/4 inch in diameter, ripening the second season, seeds 1 to 2 inches each cone, bony-coated; flowers small, cone-like, borne separately on male and female plants; leaves opposite, scalelike, covering older twigs closely in alternating pairs to ¼ inch long, pale to dark green, on new shoots awl shaped, sharp pointed and spreading; stems short, often dividing near ground, branches thick and ascending, bark red to gray-brown, furrowed, thin and shreddy, branchlets very slender; roots deep, widely spreading.

Adaptation and Distribution

Below 7,500 elevation; water relations 10 precipitation equivalent; tolerant of droughty and moist, well-drained sites.

Rocky mountain juniper is distributed throughout the West. For a current distribution map, please consult the Plant Profile page for this species on the PLANTS Website.

Establishment

Seedling should be planted in a firm weed free bed at a spacing of 3 to 6 feet. Seedling should placed in a hole or furrow large enough to contain the entire root system without bending.

Management

Care should be taken to protect young seedlings from feeding damage by small rodents, rabbits, and deer. Weeds and other competing vegetation must be controlled during the first and second years of establishment.

Pests and Potential Problems

Rocky Mountain juniper is relatively free of serious insect and disease problems. It is the alternate host for the cedar-apple rust disease which does very little harm to this species, but causes serious damage to apples and other pome fruits.

Plant Materials http://plant-materials.nrcs.usda.gov/ Plant Fact Sheet/Guide Coordination Page http://plant-materials.nrcs.usda.gov/ intranet/pfs.html> National Plant Data Center http://npdc.usda.gov/

Cultivars, Improved, and Selected Materials (and area of origin)

Bridger-Select (Northern Great Plains composite) was developed as a selected pre-varietal release. Seedlings of Rocky Mountain juniper are available from most commercial nurseries in the Rocky Mountain area.

Prepared By & Species Coordinator:

USDA NRCS Plant Materials Program

Edited: 05Feb2002 JLK; 060801 jsp

For more information about this and other plants, please contact your local NRCS field office or Conservation District, and visit the PLANTS Web sitehttp://plants.usda.gov or the Plant Materials Program Web site http://Plant-Materials.nrcs.usda.gov

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Rocky Mountain juniper

Juniperus scopulorum

Growth Form: pyramidal to irregular

Crown Density: dense
Size: 15-50 feet high
10-35 foot spread
Drought Resistance: excellent
Cold Hardiness: excellent
Growth Rate: slow

Life Span: long

Elevational Range: to 9,000 feet

Soil Conditions: excellent alkaline tolerance
Possible Insect Problems: spider mites, bark beetles

Possible Disease Problems: juniper broom rust, juniper gall

rusts, juniper true mistletoe

Wildlife Value: high: song and ground birds, large browsing

mammals
Seasonal Color: evergreen
Miscellany: native





Taken from: Trees for Conservation, a buyer's guide, Colorado State Forest Service