

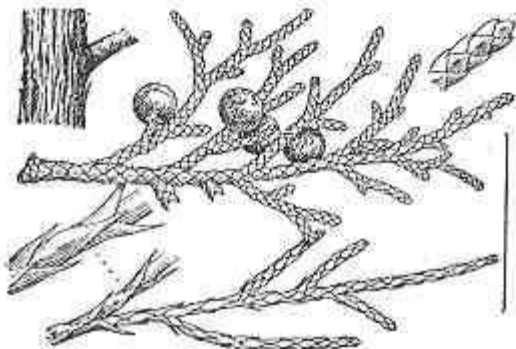
Junipers of Colorado

Three kinds of juniper are common small trees on the foothills, low mountain slopes, and the mesa country of Colorado, the Rocky Mountain juniper of dry woodlands and forests, the Utah juniper found on the driest terrain, and the One-seed juniper. Junipers are easy to distinguish from the other evergreens. They have leaves or needles which are tiny triangular or pointed overlapping scales, 1/16 to 1/8 inch long, usually pressed close to the stem. On young stems the leaves or needles may stick out from the stem. The reddish-brown or gray bark is thin and breaks into scales or long, fibrous shreds.

The fruit is berrylike, blue or brown, often about a quarter of an inch across, containing a few seeds. The juniper berries are actually miniature cones whose scales have grown in size and united. The berry requires from one to three years to mature the hard-shelled seeds inside. Juniper berries are a valuable food source for birds. The seed inside the juniper berry passes through a bird's digestive tract unharmed, and the seeds are widely distributed in this way.



Rocky Mountain Juniper



Note details to distinguish between the three junipers. Often the location is enough to give the answer. For example, the juniper that dots the canyon country of western Colorado is usually the Utah juniper. In Wyoming and along the Colorado foothills north of Colorado Springs you are looking at Rocky Mountain juniper. All three species grow near each other in southwestern Colorado and northwestern New Mexico.

Rocky Mountain Juniper

The Rocky Mountain juniper is the common juniper of the Rockies, with a range from British Columbia to Texas. It is found throughout Wyoming, Colorado, and northern New Mexico, except in the very lowest and driest elevations. In Colorado it is found above 5000 feet (1500 m) elevation on the eastern slope, and is widespread in the western part of the state, and on valleys and hillsides in the mountains. It is the only juniper of the eastern foothills north of Colorado Springs. This is the tallest juniper in Colorado. In the western part of the state it is often found with the Utah juniper, and with Pinyon pine and Gambel oak, throughout the foothills and lower montane. It also grows in wetter sites and at higher elevations than the other juniper trees, reaching 8500 feet (2600 m) above sea level.

The young juniper has a regular conical form with a pointed top, but becomes broad and irregular with age. The tree rarely exceeds 30 to 40 feet (9 to 12 m) high, though it may exceed 50 feet (15 m) in locations with

Junipers

abundant moisture. Where deer are common the lower branches of juniper may be severely cropped back, leaving a browse line with little foliage below. In dry locations the trees are only about 15 feet (4 m) tall. Usually it has a single trunk but occasionally has several equal-sized branches starting from just above the ground, especially in dry ground.

The wood is used for a posts, due to its durability and decay resistance, and for variety of small items, due to its attractive color and fragrance. The fruit is eaten by birds, and the foliage is browsed by bighorn sheep, deer, elk, and pronghorn.

The scientific name is “*Sabina scopulorum* (Sargent) Rydberg, *scopulorum* meaning “of the rocks.” Sometimes it is called Rocky Mountain red cedar.

Bark

The bark is thin and fibrous, pale reddish-brown underneath and changing to a very pale faded gray on the surface. The outer layer of bark is broken into thin scales, in small squares or long strips and ridges.

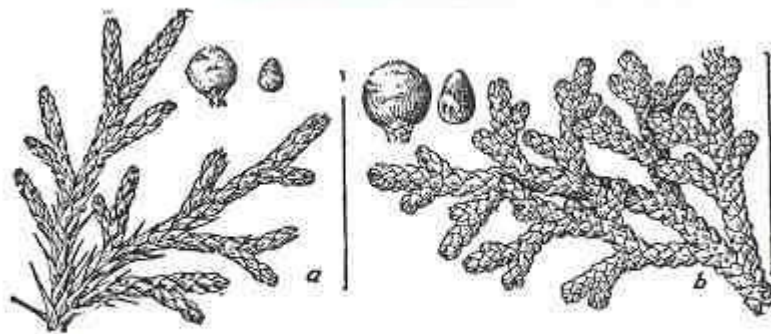
Berries

The berries are about 1/4 inch (6 mm) across, with a pale blue waxy coating. You can easily rub the coating off, leaving a green berry. The berries are juicy and hold two seeds, or sometimes one or three seeds. The seeds are hard. The berries mature after two years.

Needles

Leaves are tiny points or scales about 1/8 inch (3 mm) long; blue-green, silvery or grayish green, yellowish green, or pale to dark green, or even rusty. Twigs are thinner than on other junipers; only about 1/32 inch (0.8 mm) in contrast to 1/16 (1.6 mm) inch.

Oneseed Juniper



(a) One-seed juniper (*Sabina monosperma*)
Twig; berry; seed. (b) Utah juniper (*S. osteosperma*)
Twig; berry; seed

This tree, along with the Pinyon pine, is a dominant tree over 60 million acres of the arid southwestern United States. In Colorado and northern New Mexico Oneseed juniper grows with Pinyon pine and Ponderosa, or in pure stands, on dry rocky slopes in the lower part of the foothills, from 4000 to 7000 feet (1200 to 2100 m) elevation. Oneseed juniper grows in eastern Colorado, south of Colorado Springs, and in the southern and western parts of Colorado including the White River National Forest.

Junipers

Oneseed juniper is usually small and shrubby, generally 8 to 15 feet (2.4 to 4.5 m) high, but can have as much as 3 feet (0.9 m) trunk diameter. The large branches often separate at ground level or below. Older trees may retain dead branches. Usually round-topped, it can have a regular tapering form, about two-thirds as broad as it is tall.

The wood is light yellowish-brown or light reddish-brown, and durable, hard, and heavy. Indians made fibrous mats of the bark. The fruit is eaten by birds, quail, foxes, coyotes, raccoons, ground squirrels, and chipmunks; humans ate the berries in the not-too-distant past.

The scientific name is “*Sabina monosperma* (Engelmann) Rydberg.”

Identifying Oneseed Juniper

Bark

The bark is thin and ashy gray, ridged, with loose shreds or scales.

Berries

The berries are dark blue or copper colored, reddish-brown, 1/8 to 1/4 inch (3 to 6 mm) in diameter, with moist pulp, not dry and mealy. The berries hold one seed (rarely two) which matures in one year.

Needles

Leaves are gray-green or yellow-green; 1/25 to 1/8 inch long. Twigs 1/16 inch thick and four-sided.

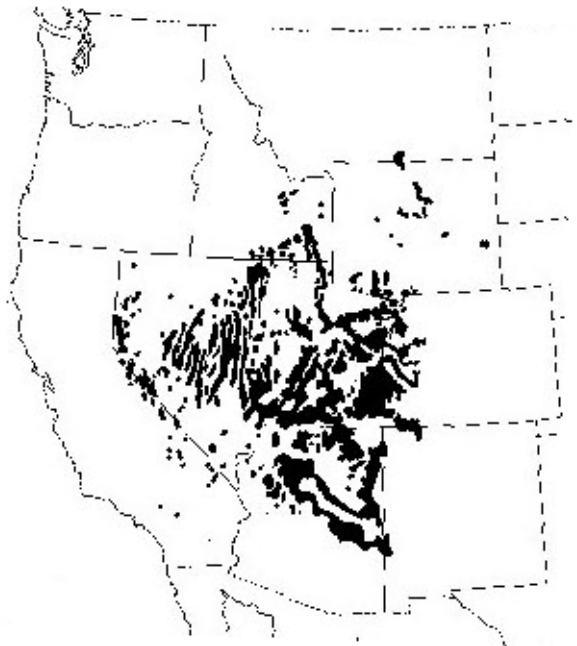
Utah Juniper

Utah juniper grows in dry, rocky or sandy locations in the high plateau country and river valleys of the western quarter of Colorado, west of the Continental Divide, from 5000 to 9500 feet (1500 to 2900 m) above sea level, principally below 7000 feet (2100 m).

Utah juniper is the most common juniper of the Pinyon-juniper woodlands of the arid western canyon country and inter-mountain basins. Where conditions are too hot and dry for any other juniper or pine, the Utah juniper grows with wide spacing, sometimes separated by fifty feet (15 m) or more. Utah juniper makes the dark green dots scattered over the canyon country of western Colorado. It is often associated with the Pinyon pine and the Rocky Mountain juniper.

This tree often is round-topped, sometimes broader than tall, with thick branches, occasionally crooked, starting at the ground. Sometimes the foliage reaches the ground, creating a large bushy form. Sometimes the rounded foliage stands on a single upright trunk. It is commonly 10 to 20 feet (3 to 6 m) tall with a maximum trunk diameter of 1 to 2 feet (0.3 to 0.6 m). In the driest conditions Utah juniper trees may have several dead limbs, showing a few live tufts of green foliage.

This tree is distinguished by the largest berries of any Colorado juniper, 1/4 to 3/4 inch (6 to 18 mm) across. The



Junipers

berries are reddish-brown, often with a pale blue waxy or powdery coating. You can easily rub off the coating. The berry contains one seed; rarely two. The scientific name is "Sabina osteosperma (Torrey) Antoine." Osteosperma means "bone-seed."



Utah Juniper

Bark

The bark is thin, very pale gray-brown, gray-brown, ash gray or almost whitish, covered with abundant long fibrous shreds or ridges.

Berries

The berries are reddish-brown and large, $\frac{1}{4}$ to $\frac{3}{4}$ inch (6 to 18 mm), and dry, mealy or fibrous inside, not moist or juicy like the Oneseed juniper berry. Sometimes coated with a thin bluish coating which can be rubbed off. The surface of the berry may have a number of small points. The berries hold one seed, sometimes two. Seeds are very hard and two-colored, brown and white.

Twigs and Needles

Leaves covering the ends of the twigs are yellow-green; $\frac{1}{16}$ to $\frac{1}{8}$ inch (1.5 mm to 3 mm) long, somewhat blunt pointed and lacking gland dots or resin spots. The foliage is thick and stubby for a juniper. The twigs are about $\frac{1}{16}$ inch (1.5 mm) thick, twice as thick as the twigs of the Rocky Mountain juniper. They have blunt ends. While the Rocky Mountain juniper twigs have a spiny feel and appearance, Utah juniper twigs are rounded and blunt to the touch, and they are a little stiffer than Rocky Mountain juniper twigs.

Utah juniper map and photo from the US Geological Survey.

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