



## Pinus edulis Engelm.

### Family: Pinaceae

### Pinyon

The genus *Pinus* is composed of about 100 species native to temperate and tropical regions of the world. Wood of pine can be separated microscopically into the white, red and yellow pine groups. The word *pinus* is the classical Latin name. The word *edulis* means edible, referring to the large seeds, known as pinyon nuts, pine nuts and pinones.

**Other Common Names:** Arizona pijn, Arizona pine, Arizona-tall, Colorado pijn, Colorado pine, Colorado pinyon, foxtail pine, nut pine, pin d'Arizona, pinien-nussbaum, pino di Colorado, pinon, pinyon, pinyon Colorado, two leaf pinyon, two needle pinyon.

**Distribution:** Pinyon is native to the southern Rocky Mountain region, predominantly in the foothills, from Colorado and Utah south to central Arizona and southern New Mexico. Also locally in southwestern Wyoming, extreme northwestern Oklahoma, the Trans-Pecos area of Texas, southeastern California and northwestern Mexico (Chihuahua).

**The Tree:** Pinyon trees reach heights of 10 to 51 feet, with diameters of 6 to 30 inches, depending on site conditions. An exceptionally large specimen was recorded at 69 feet tall, with a diameter of over 5 feet. Pinyons generally are small trees, growing less than 35 feet tall, with diameters less than 18 inches. Pinyons are long lived, growing for 75 to 200 years, with dominant trees being 400 years old. Pinyons 800 to 1,000 years old have been recorded.

**General Wood Characteristics:** The wood of pinyon is moderately heavy compared to other pines. It is slow grown and often knotty, but strong. The heartwood is yellow.

#### Mechanical Properties (2-inch standard)

	Specific gravity	MOE GPa	MOR MPa	Compression		WML <sup>a</sup> KJ/m <sup>3</sup>	Hardness N	Shear MPa
				Parallel MPa	Perpendicular MPa			
Green	0.50	4.48	33.1	17.9	3.31	52.4	2670	6.34
Dry	0.57	7.86	53.8	44.1	10.5	32.4	3820	NA

<sup>a</sup>WML = Work to maximum load.  
Reference (59).

#### Drying and Shrinkage

Type of shrinkage	Percentage of shrinkage (green to final moisture content)		
	0% MC	6% MC	20% MC
Tangential	5.2	NA	NA
Radial	4.6	NA	NA

Volumetric	9.9	NA	NA
References: (153).			

**Kiln drying schedules:** No information available at this time.

**Working Properties:** No information available at this time.

**Durability:** No information available at this time.

**Preservation:** No information available at this time.

**Uses:** Firewood, novelties, mine timbers, railroad ties, pulping, charcoal. The nuts are a culinary delicacy, while the trees have been used as commercial Christmas trees.

**Toxicity:** In general, working with pine wood may cause dermatitis, allergic bronchial asthma or rhinitis in some individuals (3,6&8).

Additional Reading and References Cited (in parentheses)

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