



***Prosopis* spp.**
Mesquite

Family: Leguminosae

North American species

Prosopis glandulosa-Algaroba, bilayati kikar, common mesquite, cuji, honey locust, **honey mesquite**, honey-pod, ibapiguazu, inesquite, ironwood, mesquite, screwbean, Torrey mesquite, wawahi, western honey mesquite.

Prosopis pubescens-Mescrew, screwbean, **screwbean mesquite**, screw-pod mesquite, scrub mesquite, tornillo.

Prosopis velutina-Mesquite, **velvet mesquite**.

South/Central American species

Prosopis abbreviata-Algarobillo espinoso.

Prosopis alba Acacia de catarina, algaroba, algaroba blanca, algarobo, algarroba, algarrobe blanco, algarrobo, algarrobo blanco, **algarrobo blanco**, algarrobo impanta, algarrobo panta, aroma, barbasco, bate caixa, bayahonda, carbon, chachaca, cuji yaque, ibope-para, igope, igope-para, ironwood, jacaranda, manca-caballa, mesquite, nacasol, screwbean, tintatico, visna, vit algarroba, white algaroba.

Prosopis affinis-Algarobilla, algarobillo, algarobilla, algarrobo nandubay, algarrobo negro, calden, espinillo, espinillo nandubay, ibope-moroti, **nandubay**.

Prosopis articulata-Mesquit, mesquite, mesquite amargo.

Prosopis caldenia-Calden.

Prosopis calingastana-Cusqui.

Prosopis chilensis-Algaroba chilena. algaroba du chili, algarroba, algarrobo, algarrobo blanco, algarrobo cileno, algarrobo de chile, algarrobo panta, arbol blanco, chilean algaroba, chileens algaroba, cupesi, dicidivi, divi-divi, mesquite, nacascal, nacascol, nacascalote, nasascalote, tcako, trupillo.

Prosopis cineraria-Jambu, kandi, shami.

Prosopis ferox-Churqui, churqui blanco, churqui jujeno, quiscataco.

Prosopis flexulosa-Algarroba, algarrobo, algarrobo amarillo, algarrobo dulce, algarrobo negro, arbol negro, lamar, lamaro, panta negro .

Prosopis hassleri-Algarrobo, algarrobo del chaco, algarrobo paraguay.

Prosopis juliflora-Acacia de catarina, algaroba, algarobo, algarroba, algarrobo, algarrobo Colorado, algarrobo del brasil, aroma, aroma americana, aroma, barbasco, baron, bate caixa, bavahonda, bayahonda, bayahonde, bayarone, biia, cambron, carbon, cashaw, catzimec, chachaca, chucata, cuida, cuji, cuji amarillo, cuji carora, cuji negro, cuji yaque, espino ruco, ganda babool, gandasein, guatapana, guisache, haas, honey locust, huupa, inda-a, indjoe, indju, ironwood, jacaranda, ju'upa, jupala, katzimelk, kuigi, maiz criollo, maje, manca caballo, manca-caballa, mareno, me-equite, mesquit-tree, mesquite, mesquito, mezquite, mezquite amarillo, mezquite blanco, mezquite chino, mezquite Colorado, mimisquicubitl, mimisquitl, misquitl, mizquitl, nacascol, nacasol, prosopis de mexique, qui, t'hai, tai, taj, tepemezquite, tintatico, toji, trupillo, tsirisicua, ttahi, tziritsequa, tziritzecua, uejoue, upala, utuh, visna, wawabi, yaga-bu, yaque, yaque blanco, yaque negro.

Prosopis kuntzei-Barba de tigre, caranda, itin, jacaranda, lanza-lanza, palo mataco, yacaranda, yacaranda itin.

Prosopis laevigata-Algarrobo, mesquite, mezquite, thako.

Prosopis nandubay-Algarrobillo, espinillenhout, espinillo, nandubay.

Prosopis nigra-Acacia de catarina, algarrobo morado, algaroba, algaroba negra, algaroba negro, algaroba noir, algarobo, algarroba, algarroba dulce, **algarroba negro**, algarrobi negro, algarrobo, algarrobo amarillo, algarrobo negro, algeroba negra, arbol negro, aroma, barbasco, bate caixa, bayahonda, black algaroba, carbon, chachaca, cuji yaque, ibope-hu, ibope-saiyu, igope-guazu, ironwood, jacaranda, manca-caballa, mesquite, mezquite, nacasol, screwbean, tintatico, visna, yura-tacu, zwarte algaroba.

Prosopis pallida-Algaroba, algarroba, algarroba paiva, algarrobo, algarrobo americano, carobier, huarango, kiawe, mesquite.

Prosopis palmeri-Palo de hierro, palo fierro.

Prosopis panta-Algarobilla, algarrobo, algarrobo panta, cama tala, cama tale, panta.

Prosopis pugionata-Algarrobo, algarrobo de las salinas, alpataco.

Prosopis rubiflora-Espinillo.

Prosopis ruscifolia-Algarrobo blanco, ibope-moroti, olkha, pao de espinho, quilin, vinal, visnal, yuncumarim.

Prosopis tamarugo-Tamarugo.

Prosopis tamaruya-Tamarugo.

Prosopis torquata-Lata, quenti, schinqui, tintitaco, tusca.

Prosopis vinalillo-Algarrobo blanco, algarrobo santiagueno, quilin, vinalillo.

African/Asian species

Prosopis africana-Abusurug, akaba, akaka, guele, ir, kaki, kiriya, kpanena, palo, pangi, pau carvao, stenkoltra, zingili.

Prosopis cineraria-Ghaf, ihand, jambu, jand, jandi, jhand, shumi.

Prosopis pallida Algarroba, bayahonda, kiawe, mesquite.

The Tree:

Prosopis alba reaches heights of 60 ft (24 m), with diameters of 5 ft (2 m) (94).

Prosopis affinis reaches heights of 65 ft (26 m), with diameters of 2 ft (0.6 m) (94).

Prosopis glandulosa reaches heights of 40 ft (16 m), with diameters of 10 inches (25 cm) to 4 ft (1.2 m) (74).

Prosopis juliflora reaches heights of 40 ft (16 m), with a diameter of 4 ft (1.2 m). It is a deciduous tree with a short, twisted bole, which is cultivated as an ornamental and used for reforestation and conservation in dry areas. It is moderately fast-growing (4).

Prosopis kuntzei is a low tree, 35 ft (11 m) tall and 2 ft (0.6 m) in diameter, with large, sharp spines. It is devoid of leaves for most of the year (74, 94).

Prosopis nanduba rarely reaches heights of 20 ft (6 m) (74).

Prosopis nigra reaches heights of 33 to 52 ft (10 to 16 m), with a diameter of 1.3 to 4 ft (0.4 to 1.2 m) and a clear bole of 10 ft (3 m) (94, 96).

Prosopis ruscifolia reaches heights of 50 ft (15 m), with diameters of 1.5 ft (0.5 m) (94).

The Wood

General

Prosopis alba: The sapwood is light yellow, while the heartwood is reddish brown changing to dark brown. The wood has a pronounced stripe, with spiral to interlocked grain (94).

Prosopis affinis: The sapwood is yellow, while the heartwood is a reddish brown, changing to dark brown upon exposure to the air. The wood has a medium texture, with spiral to interlocked grain (94).

Prosopis caldenia: The sapwood is yellow-ochre; the heartwood is reddish brown, turning chestnut brown after cut. The wood has pronounced stripes, with a medium texture and wavy, interlocked grain (94).

Prosopis glandulosa: The sapwood is a lemon yellow, while the heartwood is a deep reddish brown. The wood is dense, close grained, very hard and heavy, but somewhat brittle. It is exceedingly resistant to heartwood decay, with a thin sapwood. It contains high concentrations of tannins (94).

Prosopis juliflora: The sapwood is narrow and pale yellow, while the heartwood is yellowish brown to dark brown. The wood has a slight luster, straight to wavy grain, and medium to coarse texture. It has a fragrant odor when freshly cut. It is hard, heavy, tough and strong (4).

Prosopis kuntzei: The sapwood is light yellow, while the heartwood is chestnut brown with patches of dark violet. The heartwood darkens upon exposure. The wood has a fine texture and straight to wavy to interlocked grain. This species is probably the densest wood of the genus (74, 94).

Prosopis nigra: The sapwood is yellow-ochre, while the sapwood is chestnut brown, darkening upon exposure, and sometimes has a wavy stripe. The texture is average, with slanted, interlocked grain. The wood is resistant to heartwood decay and is heavy (94, 96).

Prosopis ruscifolia: The sapwood is light yellow; the heartwood ranges from yellow-brown to reddish brown, with dark stripes, and darkens upon exposure. The wood has coarse to medium texture, with wavy to interlocked grain (94).

Mechanical Properties (2-inch standard)

	Specific gravity	MOE X10 ⁶ lbf/in ²	MOR lbf/in ²	Compression		WML ^a in-lbf/in ³	Hardness lbf	Shear lbf/in ²
				Parallel lbf/in ²	Perpendicular lbf/in ²			
<i>Prosopisaffinis</i>^b								
Green	-	-	-	-	7,040	-	-	-
Dry	0.93- 1.05	1.42	6,430	-	-	-	-	-
<i>Prosopisalba</i>^b								
Green	-	-	-	-	-	-	-	-
Dry	0.75- 0.85	0.88	9,150	8,510	4,550	-	-	-
<i>Prosopiscaldenia</i>^b								
Green	-	-	-	-	-	-	-	-
Dry	0.65- 0.75	-	4,820	4,650	-	-	-	-
<i>Prosopischilensis</i>								
Green	-	-	-	-	-	-	-	-
Dry	0.80- 0.92 ^c	-	-	-	-	-	-	-
<i>Prosopisglandulosa</i>								
Green	-	-	-	-	-	-	-	-
Dry	0.819 ^d	-	-	-	-	-	-	-
<i>Prosopisjuliflora</i>								
Green	-	1.80 ^e	10,600 ^e	5,300 ^e	-	-	-	1,320 ^e
Dry	0.944 ^b	1.33 ^b 2.06 ^e	12,300 ^b 16,500 ^e	9,120 ^b 9,000 ^e	-	-	2,940 ^b	2,180 ^e
<i>Prosopiskuntzei</i>^b								
Green	-	-	-	-	-	-	-	-
Dry	1.20- 1.35	2.52	22,300	12,700	-	-	-	-
<i>Prosopisnigra</i>								
Green	-	-	-	-	-	-	-	-
Dry	0.85 ^b 0.80 ^f	0.85 ^b 1.38 ^f	9,050 ^b 13,400 ^f	8,280 ^b 8,700 ^f	4,410 ^b	-	-	1,990 ^b
<i>Prosopisruscifolia</i>								
Green	-	-	-	-	-	-	-	-
Dry	0.70- 0.85 ^b	-	-	-	-	-	-	-

^aWML = Work to maximum load.

^bReference (94).

^cReference (74).

^dReference (103).

^eReference (4).

^fReference (96).

Drying and Shrinkage

Type of shrinkage	Percentage of shrinkage (green to final moisture content)		
	0% MC	6% MC	20% MC
<i>Prosopisalba</i>			
Tangential	3.1 ^b	2.8 ^c	0.7 ^b
Radial	2.2 ^b	2.1 ^c	0.2 ^b
Volumetric	–	8.2 ^c ^d	–
<i>Prosopisglandulosa</i>			
Tangential	3.2	1.4	0.14
Radial	1.6	0.72	0.09
Volumetric	4.8	2.12	0.23
<i>Prosopisjuliflora</i>^e			
Tangential	8.1	7.1	–
Radial	>5.1	>4.1	–
Volumetric	–	–	–
<i>Prosopiskuntzei</i>^c			
Tangential	–	5.3	–
Radial	–	4.3	–
Volumetric	–	11.0	–
<i>Prosopisnigra</i>^c			
Tangential	–	2.5	–
Radial	–	1.9	–
Volumetric	–	6.6	–
<i>Prosopisnigra</i>^f			
Tangential	–	3.0	–
Radial	–	2.1	–
Volumetric	–	6.8	–

^a*Prosopis juliflora*: This species tends to produce small checks during air drying, but it is very stable (4). *Prosopis nigra*: Rated as very stable (96).

^bReference (95).

^cReference (94).

^dReference (103).

^eReference (4).

^fReference (96).

Kiln Drying Schedules: No information available at this time.

Working Properties: *Prosopis juliflora* works easily with most tools and finishes smoothly, but it does not take a high polish. Preboring is necessary for nailing (4).

Durability: Mesquite is rated as very resistant to heartwood decay (98).

Prosopis juliflora is classed as resistant to very resistant to heartwood decay. It is susceptible to Lyctus beetles, termites and pinhole bores. (4)

Prosopis nigra is resistant to heartwood decay in damp and open air conditions (96).

Preservation: *Prosopis nigra* is slightly permeable with reduced absorption. Immersion or surface treatments are good if parts are sapwood, although puncturing will work somewhat (96).

Uses: *Prosopis chilensis*: Fuel, posts, stakes (74).

Prosopis glandulosa: Buildings, cabinetry, posts, charcoal, fuel, railway crossties, paving blocks (74).

Prosopis juliflora: Charcoal, firewood, buildings, cabinetry, and posts; pods are good for fodder (4).

Prosopis nandubay: Posts (74).

Prosopis nigra: Flooring, cooperage, firewood, charcoal, posts, boats, carriages, turnery, furniture, frames for doors and windows (96).

Toxicity: Dermatitis has been reported for *Prosopis juliflora*, *P. africana* and *P. glandulosa*, possibly due to an alkaloid, prospinine (40, 64, 105).

Additional Reading and References Cited (in parentheses)

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