



## *Olneya tesota*

**Family: Leguminosae (Papilionoideae)**

### **Desert Ironwood**

*Olneya tesota* (Desert Ironwood) is the only species in this genus. The name *olneya* is named for Stephen Thayer Olney (1812-1878), businessman and botanist of Rhode Island. The word *tesota* is a Native American name. The native Americans of the area grind the roasted beans for use in “pinole”.

*Olneya tesota*-Arbol de hierro, black ironwood, **desert ironwood**, hesen, ironwood, Mexican ironwood, palo de hierro, palo fierro, palo tinta, sonora ironwood, tesota, tosota, trauwood, una de gato.

#### **Distribution**

In southeastern California, southwestern Arizona and northwestern Mexico on gravelly or sandy mesas or rocky foothills of the desert.

#### **The Tree**

Desert ironwood trees are shrubs to small trees which can reach heights of 30 feet, with a diameter of 3 feet. The branches are armed with stiff, sharp spines.

#### **The Wood**

##### **General**

The wood from *Olneya tesota* is hard, strong but brittle and difficult to work. It is lustrous, without distinctive odor or taste when dry. Its texture is medium coarse, with irregular grain. It finishes smoothly with a high natural polish. The sapwood is light brown to yellow, while the heartwood is dark brown.

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

	Specific gravity	MOE x10 <sup>6</sup> lbf/in <sup>2</sup>	MOR lbf/in <sup>2</sup>	Compression		WML <sup>a</sup> in-lbf/in <sup>3</sup>	Hardness lbf	Shear lbf/in <sup>2</sup>
				Parallel lbf/in <sup>2</sup>	Perpendicular lbf/in <sup>2</sup>			
Green	-	-	-	-	-	-	-	-
Dry	1.15	-	-	-	-	-	-	-

<sup>a</sup>WML = Work to maximum load.  
Reference (3).

#### **Drying and Shrinkage**

No information available at this time.

#### **Kiln Drying Schedule**

No information available at this time.

**Working Properties:** Very difficult to work with hand tools. Can be machined if tools are kept sharp. It finishes well and has a good luster.

**Durability:** Desert ironwood is very durable.

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

**Uses:** Fuelwood, brush backs, turnery, novelties.

**Toxicity:** Sawdust from this wood is reported to irritate the eyes and nose.

**Additional Reading and References Cited (in parentheses)**

1. Benson, L. and Darrow, R. A. Trees and shrubs of the southwestern deserts. Tucson, AZ, USA: The University of Arizona Press; 1981.
2. Record, S. J. and Hess R. W. Timbers of the new world. New Haven, CT: Yale University Press; 1943.
3. Standley, P. C. *Olneya tesota*. Mem. Amer. Acad. N. Ser. 1855; 5:328.