

# Pistachios

## About Pistachios

The pistachio tree (*Pistacia vera L.*) is native to western Asia. Trees are broad, bushy, and 8-10 m tall. Buds form in early spring and pollen is released in early to mid-April. Nuts may be harvested from late August through September. Pistachios produce male and female flowers on separate trees and are wind pollinated. Common female cultivars include Kerman (primary), Golden Hills, and Lost Hills. Common male cultivars are Peters (primary) and Randy. Pistachios produce alternating large and small crops across years.



## Climate and soil

Temperature*	Frost tolerance	Water needs	Tolerance to water logging	Drought tolerance
Thrives in cool to cold winters and long hot summers.	Freezes destroy young fruits and blossoms. -8C damages young growth.	Deep, infrequent watering essential for production.	Low	Moderate to high

\*requires approximately 1,000 hours of temperature at or below 45° F.

Humidity tolerance	Wind tolerance	Soil needs	Nutrient requirements
Low	Moderate to high	Deep loamy soil. Rootstocks are saline tolerant.	Low-production year. 125 kg N/ha, 110 kg K/ha High-production year. 250 kg N/ha and 225 kg K/ha

## Cultural practices

<b>Propagation</b>	Grafting or budding.
<b>Rootstocks</b>	UC Berkeley I is best; Pioneer Gold I is acceptable. Atlantica and Terebinthus are prone to disease but very saline tolerant.
<b>Spacing</b>	6-6.5 m between rows; 5-6.4 m between trees in row
<b>Male : Female Ratio</b>	1 : 19-24
<b>Orchard care</b>	Clean cultivated and level ground
<b>Time to 1<sup>st</sup> harvest</b>	5 to 6 years
<b>Time to full production</b>	10 to 12 years
<b>Normal productive life</b>	Centuries under favorable conditions
<b>Expected yields</b>	A fully mature tree with good soils and cultivars may produce up to 23 kg/ tree of hulled and dried nuts.
<b>Harvest</b>	Hand or machine (Shake and then sweep) when hull becomes puffy and loose.
<b>Storage</b>	Remove hulls and store in dry, vermin-proof container. Fresh nuts can be stored for 4-6 weeks if refrigerated.
<b>Pests and diseases</b>	Fungi Verticillium wilt and Armillaria mellea; aphid, stink bugs, leaf-footed bugs, navel orangeworm; alternaria and botryosphaeria blights.

## Training, Pruning, and Thinning

<b>At Planting</b>	Stake next to root ball at planting.
<b>Early in Second Production Season</b>	Pinch primary limbs to 36 cm and tie above the tree in a vase shape. Pinch off lateral growth of rootstock and scion.
<b>Second Winter</b>	Thin to 2-3 branches per primary limb. Head secondary branches to 30 cm and tie upright in a vase shape.