

# Walnuts

## Background

There are some 20 species of *Juglans*, the walnut genus, and all are native to temperate and sub-tropical forests of Europe, Asia, North America, and Central and South America. The species cultivated for its sweet nut is *Juglans regia*, commonly known as English walnut but it is also called Persian walnut and in years past, the royal nut of Jupiter. This species is believed to have originated near the Caspian Sea in Iran and the native habitat extends east from Turkey and Iran to valleys in western China and the eastern Himalayas. A distinctive characteristic of this walnut is that the hull separates readily from the shell.

Walnut species known as black walnut are grown for timber production or as rootstock for grafting and there are some sixteen different species. The nuts of black walnuts have a husk firmly attached to a deeply furrowed shell and the kernel is small and fits tightly inside the shell. The species called eastern black walnut (*J. nigra*), is native to eastern United States and Canada and it is valued for its resistance to root disease and is therefore used in rootstock breeding programs. The timber is also valued for furniture and gunstocks and the green fruit is valued for its medicinal properties. Another black walnut is northern California black walnut (*J. hindsii*), and this black walnut is also used as a rootstock and a rootstock parent due to its high vigour. Southern California black walnut (*J. californica*) is native to coastal southern California and grows as a shrubby tree. Two other black walnuts, *J. major* from Arizona and *J. microcarpa* from Texas, have been used occasionally as rootstocks in arid and salty soils. Several other species of black walnut hail from Central America. Japanese walnut (*J. ailanthifolia*) has also been used as a rootstock in propagation. Some species of walnut that hail from tropical regions including Andean walnut (*J. neotropica*) are evergreen.

Cultivars of English walnut are grown for commercial nut production in southern Europe (particularly France, Germany, Italy and Turkey), in the United States (California and Oregon), and in China, India, South Africa, Australia and New Zealand. Figures