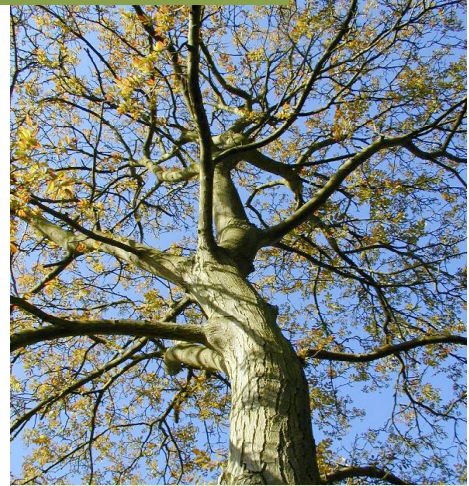


Juglans regia



Family: Juglandaceae

Common names: Common walnut

Local names: Akhrot, Khor, Danti-akhrot (Joshimath)

Ayurvedic name: Shailbhav, Akshot, Karpraal

Plant profile:

Juglans regia is a large tree native to southeastern Europe and western Asia. The generic name *Juglans* is a combination of the Latin *jovis* (the king of gods) and *glans* (nut). The leaves are imparipinnate with the leaflets in pairs, sessile, oblong, rounded at base, acuminate. The fruit is a fleshy drupe, oblong, ovoid and olive green colour when immature. The shell is hard and thick. And the kernels are pale white, thick and oily. The tree is found growing wild throughout the Himalayas and hills of Assam at altitudes of 1000-3300 m. In Himachal Pradesh, the tall giant trees of wild varieties are found in shaded ravines in Chamba, Kullu, Shimla, and Sirmour. Recently, people have started cultivating superior, grafted varieties of walnuts for plantations. Flowering takes place in March-April and fruiting in September-October. The bark of the tree is also peeled and the dried fruit taken away from the tree during the month of September and October. Under natural conditions the fruits fall to the ground and around the tree. The exocarp cracks and rots off. The nuts, however, are subject to attack by birds, monkeys and rodents and large quantities of them are destroyed. The bark is popularly known as Dandasa and is illegally traded.

Medicinal uses:

- **Parts used:** Root, bark, leaves and fruit.
- **Active principles:** Juglandic acid, juglonone, barium and arsenic in traces are present. The fruits contain oxalic acid, resin and a fixed oil of drying nature. The kernel contains B group of vitamins and several mineral elements. The unripe fruits are the richest source of vitamin C.
- **Disease cured and dosage:**
 - **Ethnomedicinal:** In the middle ages, walnuts were believed to cure mental disorders because of the resemblance of the shelled nuts to brain. The leaves are alterative and given in scrofula, rickets and leucorrhoea. The decoction of the bark is a galactafuge and is used to stop mammary secretions. It is used as an astringent to check diarrhoea and menorrhagia and for gargling in case of sore throat, for cleaning teeth and as a dye. The kernel is supposed to possess aphrodisiac and vermifuge properties. It is given in general debility in children, for intestinal worms and as an alterative in rheumatism. The plant is of immense value in confectionary and ice creams and is used as an article of food when dried. The oil is used as a drying agent for paints, oil paints, printing inks, and varnishes and for making soaps. The oil is a mild laxative, cholagogue and is given in torpid liver. Locally, the juice of the unripe fruit is considered to be useful in alopecia whereas the root bark juice mixed in mustard oil is used in leucoderma. Pulverised walnuts can be used for decolourising charcoal and activated carbon.
 - **Ethnoveterinary:** Data not sufficient
- **Therapeutic description:**

- Systemic effects: Treats external haemorrhage and local inflammation.
 - Nervous system: It has mild sedative property.
 - Digestive system: It is used to cure abdominal and intestinal colic and other gastro-intestinal upsets.
 - Skin: Used as a treatment for alopecia and other skin diseases.
- **Drug preparation:** To convert the plant into a drug, the bark is converted into paste.
 - It must be stored in damp free containers.
 - The shelf life of the medicine is two years.