

Teak (*Tectona grandis*)

Distribution

Teak (*Tectona grandis*) is one of the most important timber trees of India and South-east Asia. The species is indigenous to India and the South-east Asian region. In India teak is distributed naturally in the Peninsular region below 24°N latitude. The most important teak forests are found in Madhya Pradesh, Maharashtra, Tamil Nadu, Karnataka and Kerala besides Uttar Pradesh (small extent), Gujarat, Orissa, Rajasthan, Andhra Pradesh and Manipur. Outside its natural occurrence teak has been raised in different states, e.g. Uttar Pradesh, West Bengal, Assam, Bihar, Orissa, Andamans, Andhra Pradesh, etc. Teak has also been introduced in different parts of the world outside its natural occurrence in South-east Asia, Pacific, East and West Africa, the Caribbean, South America and Central America regions.

Morphology

Teak is a large tree which can attain a height more than 30 m. It has a simple root system. Colour of the bark varies from pale brown to grey. Leaves have some distinct features by which it can easily be identified. It bears a pair of leaves that stands at right angle to the next upper or lower pair and in each pair, two leaves are situated at a node on the opposite side. Young leaves are red in colour but become dark green at maturity. These are broad towards apex, oval in outline, widest at the centre and bear small star shaped hairs. Inflorescence large, flowers are white in colour and become inflated at maturity. Fruit is fleshy and bears 1-4 seeds which are enclosed in a stony covering.

Teak sheds leaves from November to January. The flowers appear from June to September and fruits ripen from November to January.

Utilisation

Teak is recognized as the best timber for the manufacture of door, window frames and shutters, wagon and carriage, furniture, cabinets, ships, agricultural implements, decorative flooring and wall panelling because of its moderate weight, appropriate strength, dimensional stability and durability, easy workability and finishing qualities and most appealing grain, texture, colour and figure.

Teak is also used in a variety of ways apart from its use as timber. Various parts of the tree, including the wood are credited with medicinal properties. Kernels yield fatty oil (about 2 per cent). Flowers are considered useful against a number of diseases such as biliousness, bronchitis and urinary discharges. Both flowers and seeds are considered diuretic. Leaves are used in indigenous medicine and their extract indicates complete inhibition of *Mycobacterium tuberculosis*. The leaves also contain yellow and red dyes, which have been recommended for dyeing of silk, wool and cotton. The leaves are occasionally used as plates for dining purposes, for making cheap umbrellas and for thatching temporary huts in some places. The bark is regarded as an astringent and considered useful in bronchitis. Various valuable compounds have been isolated and identified from the wood, bark, root and leaves of the tree. Activated charcoal can be prepared from its saw dust.

Source: Indian Council of Forestry Research and Education, Dehradun. Teak (*Tectona grandis*). Dehradun, Forest Research Institute.