Zanthoxylum armatum

Family: Rutaceae

Local/common names: Toothache tree, Timoor, Tejbal (Gujarat), Tejbel (Orissa), Nepali Dhania (Hindi), Tejphal, Tumru

Trade name: Data not available

Profile:

Zanthoxylum is a large genus of the family Rutaceae characterized by aromatic, prickly trees or shrubs whose bark is generally medicinally important.

Habitat and ecology: It occurs commonly in hot valleys of the sub-tropical Himalayas up to an altitude of 1800 m, in woodlands, sunny edges and in dappled shade where soil is generally moist. It is found in Western, Central and Eastern Himalaya from Jammu & Kashmir to Bhutan including places like Nepal, China and Pakistan. It is also found in Khasi hills and Eastern Ghats.

Morphology: *Zanthoxylum armatum* is an armed, scandent or erect shrub that is 3-6 m tall, with dense foliage. Branches are armed and the prickles are flattened and up to 2 cm long. The bark is pale brown and deeply furrowed. Leaves are imparipinnate or trifoliolate, 5-23 cm long, often with lanceolate, entire to glandular, crenate, acute to obtusely acuminate leaflets. Flowers are greenish-yellow in dense, terminal and auxiliary, sparse panicles are present. Follicles are generally reddish, sub-globose and glabrous. Seeds are solitary in a fruit, globose and shining back.

Distinguishing features: An armed, scandent or erect shrub with dense lanceolate foliage and the bark is pale brown and deeply furrowed. Flowers are greenish-yellow and dense.

Life cycle: Flowering takes place in July-August and fruiting takes place in October-November.

Uses: All parts such as fruits, seeds, bark, stem and thorn are medicinally important. Seeds and barks are used as an aromatic tonic in fever, dyspepsia and cholera. Fruits, branches and thorns are used as a remedy for toothache and are considered carminative, stomachic and anthelmintic. The stem has exhibited hypoglycemic properties in preliminary trials. An extract of the fruit is reported to be useful in expelling the roundworms. Due to its deodorizing, antiseptic and disinfectant properties, the fruits and oil are used in dental trouble and a lotion made from the plant extract is useful for scabies. They are also used to ward off houseflies. The steam-distilled oil has been reported to show anti-fungal activity against a number of fungi. The twigs of branches are chewed and used for cleaning teeth. It is also useful as a condiment and used for purification of water. Root bark is used as flavouring agent in place of mulhati (liquorice plant) in Paan (a mouth freshener made by wrapping areca nut in betel leaf). The seeds are utilized in Pakistan for preserving furs and for hair lotions. The bark is a noted febrifugal, sudorific and diuretic property. The fruits yield an essential oil that is a potential source for linalool and exploited for perfumes and cosmetics. The oil of *Zanthoxylum armatum* fruits is used for preparation of 'Wartara oil.' Timoor stem and root bark both are medicinally important. Fruit is used as antibacterial/anthelmintic. Locally, the plant bark is used as local anaesthetic. Local Bhotias collect the plant from the wild in the Pauri Garhwal of Uttarakhand. Seed powder mixed with powder of akhrot (*Juglans regia*) is used as dentifrice in pyorrhoea. It is beneficial in deranged kapha, dyspnoea, cough, stomatitis, and deranged vata, digestive, ushna, katu, tikta, and appetizing and gastric stimulant.

Market rate: Data not available