

# *Taxus baccata*



**Family:** Taxaceae

**Local/common names:**

Himalayan Yew, Birmi (Kashmir), Thaner, Thuner (Uttarakhand), Cheongbu (Sikkim), Thuner (Arunachal Pradesh), Tcheiraygulab (Nepal)

**Trade name:** Birini and Talis Patra

**Profile:**

*Taxus baccata* is an evergreen tree. It is a frost hardy and drought tender species. The tree is famous for containing Taxol, a chemical constituent that is used for the treatment of breast cancer. The species have been over exploited for trade and medicines in recent decades. Hence, the population of the species has come under threat. A number of states have already banned the exploitation of this plant.

**Habitat and ecology:** The altitudinal range of *Taxus baccata* varies from 2100-3400 m. it occurs in forests and shady ravines, usually in the under storey. The plant is found in montane wet temperate forests, moist temperate forests and dry temperate forests. It prefers to grow in warm, per-humid eco-regions with brown hill soil. The species associated with this plant are *Quercus semicarpifolia*, *Q. incana*, *Q. dilatata*, *Cedrus deodara*, *Abies pindrow* and *Picea smithiana* (especially in the Eastern Himalayas). It is distributed from Afghanistan to Southwest China, Burma and Southeast Asia. In India, the plant is distributed in Jammu and Kashmir, Himachal Pradesh, Uttarakhand, Sikkim, West Bengal, Assam, Meghalaya, Manipur, Arunachal Pradesh and Tamil Nadu.

**Morphology:** *Taxus baccata* is a slow growing, evergreen tree which is not more than 10 m in height and 1.5-1.8 m in girth. The foliage is dark green and has a thin bark that is dark reddish-grey and flaking. Leaves are linear, flattened, curved, spiny-tipped, leathery, dark, glossy green, 2-3.5 cm long and 3 mm broad but often narrower, 2-ranked and borne on hairless branchlets. The male cone and female strobili are usually on different trees. Male cones are in catkins, sub-globose and solitary in the leaf axil. The female strobili are solitary, consisting of scales and the erect ovule is surrounded by a membranous cup shaped disk. The fruit is red, fleshy, about 8 mm and often almost concealing a single green seed.

**Distinguishing features:** The tree has dark green leaves with silvery appearance and looks very attractive. The tree has a reddish-brown bark. During fruiting period, the red and fleshy fruits with a single green seed are quite attractive.

**Life cycle:** Flowering takes place during March-May whereas fruiting takes place in September-November. The fruits ripen in October-November.

**Uses:** It is an ornamental plant. The arils removed from the seeds have diuretic and laxative effects. The red aril surrounding the seed is edible. The plant also has anti-cancer properties. Since ages, the plant has been in use as a medicine, especially as a painkiller and is known as 'postel'. The plant extract is also used in the cosmetic industry. The timber of the plant is valued for great strength and durability. In some places, the parts of the plant are used as incense as the plant has a distinct aroma. Tender leaves are also used as fodder and fed to cattle in Pakistan. All the parts except the fleshy aril are highly poisonous. It is also used as fish poison. Tribals eat the non-poisonous fleshy aril, which has stomachic, carminative and expectorant properties.

**Market rate:** Seeds are sold at the rate of Rs.1000/- per kg whereas the price of dried *Taxus* leaves are sold at Rs.350/- per kg.