Salix alba

Family: Salicaceae

Local/common names: White willow, Vivir (Kashmir), Bis, Malchang, Bhushan and Madnu (Punjab), Changma (Leh, Lahaul and Spiti)

Trade name: Cricket bat willow

Profile:
Trees are a very rare sight in cold deserts, but *Salix* is among the few species that naturally grows in the places like Ladakh, Lahaul and Spiti in India. The local communities of the Western Indian Himalayan region use this wood extensively for timber. *Salix* branches are soaked in water overnight to make them flexible enough so that they can be woven to make baskets and fences.

Habitat and ecology: The tree is often found along streams in association with *Alder* and downy birch (*Betual pubescens)* but not in waterlogged soils. The species is naturally distributed throughout Europe, northern Africa and the temperate regions of Asia. In India, the plant is naturally found in Ladakh, Lahaul and Spiti.

Morphology: White willow is a well-developed tree growing up to a height of 20-25 m with the principal boughs and branches ascending at a sharp angle to form a pointed or truncated crown. The bark is deeply fissured and greyish-brown and its wigs at first are densely pubescent with silky hairs and later become glabrous and brown or olive in the second year. The buds are dark brown, pubescent, small, ovoid and pointed in shape. The leaves are lanceolate-acuminate and between 5-10 cm long and 1 cm wide. Their edges are minutely serrated and the lamina are silver-grey at first, becoming dull green with age. Catkins appear with the leaves in late April-May with the male catkins 5 cm long and uniformly pale yellow and the female catkins being shorter and narrower.

Distinguishing features: Their edges are minutely serrated and the lamina at first silver-grey, which makes *Salix alba* easily identifiable at a distance.

Life cycle: Flowering takes place in October-December before snowfall.

Uses: Famous as the original source of salicylic acid (the precursor of aspirin), white willow and several closely related species have been used for thousands of years to relieve joint pain and manage fevers. The bark is anodyne, anti-inflammatory, anti-periodic, antiseptic, astringent, diaphoretic, diuretic, febrifuge, hypnotic, sedative and tonic. It has been used internally in the treatment of dyspepsia connected with debility of the digestive organs, rheumatism, arthritis, gout, inflammatory stages of autoimmune diseases, fever, neuralgia, colic and headache. Its tonic and astringent properties render it useful in convalescence from acute diseases, in treating worms, chronic dysentery and diarrhoea. An infusion of the leaves has a calming effect and is helpful in the treatment of nervous insomnia. When added to bath water, the infusion relieves widespread rheumatism. The leaves can be harvested throughout the growing season are used in both, fresh or dried form. It is used for construction purposes. The stem and branches are used as thatching and for making handles for doors and windows. Baskets are woven with *Salix* twigs and agricultural implements like winnows, ploughs and harrows are made out of them. The wooden piece, which is bored through the nostrils of bullocks that plough the land is also made of *Salix*. Local people use snow boot made out of *Salix* twigs. The traditional hand looms or 'khaddis' are made from *Salix* wood. The wood is also used in making the traditional cylindrical mixer in which salted tea is made. Wooden racks and cross stands, on which holy books are kept, are all made of the *Salix* wood.

Market rate: Cuttings are available in the market at a rate of Rs.10/- per cutting.