

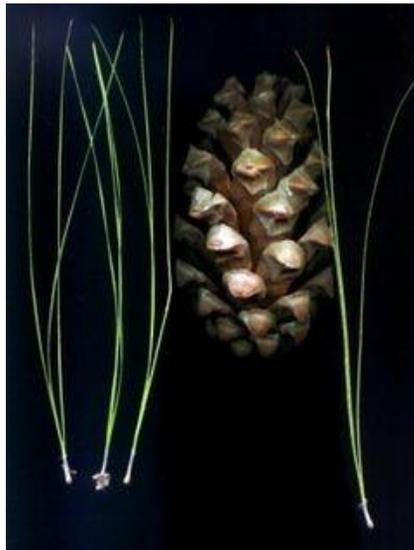


SNS COLLEGE OF PHARMACY AND HEALTH SCIENCES

Sathy Main Road, SNS Kalvi Nagar,
Saravanampatti Post, Coimbatore - 641 035,
Tamil Nadu.



ARJUNA



TREE STUDY : **PINUS LONGIFOLIA**

GENERAL DESCRIPTION

The Chir Pine (*Pinus roxburghii*) named after William Roxburghii, is a pine native to the Himalaya. The range extends from northern Pakistan (North-West Frontier Province, Azad Kashmir), across northern India (Jammu and Kashmir, Punjab, Himachal Pradesh, Uttarakhand, Sikkim) and Nepal to Bhutan. It generally occurs at lower altitudes than other pines in the Himalaya, from 500-2000 m, occasionally up to 2,300 metres (7,500 ft).

Chir Pine is closely related to Canary Island Pine, Turkish Pine and Maritime Pine, which all share many features with it. It is a relatively non-variable species, with constant morphology over the entire range.



□ **LOCATION**

This tree is located on a mound at **POLYTECHNIC FACULTY** in JAMIAMILLIA ISLAMIA.



□ **BOTANICAL NAME**

Pinus longifolia or Pinus Roxburghii

JAMIA POLYTECHNIC LAWN

□ **SCIENTIFIC DISCRIPTION**

KINGDOM : Plantae

GENUS : Pinus

SPECIES : P.Roxburghii

□ **COMMON NAME**

Chir pine, Imodi pine; Chinese: xu mi chang ye song

The species comes closer than any other other pine to being deciduous, having a needle retention time of one year, the shortest of any pine.



□ **FORM & HEIGHT**

It is a large tree reaching 30-50 m with a trunk diameter of up to 2 m, exceptionally 3 m.

□ **DETAILED DISCRIPTION**

TRUNK/BARK/BRANCHING: It is a large tree reaching 30-50 m with a trunk diameter of up to 2 m, exceptionally 3 m. The bark is red-brown, thick and deeply fissured at the base of the trunk, thinner and flaky in the upper crown.

LEAVES: The leaves are needle-like, in fascicles of three, very slender, 20-35 cm long, and distinctly yellowish green.

FRUIT: The cones are ovoid conic, 12-24 cm long and 5-8 cm broad at the base when closed, green at first, ripening glossy chestnut-brown when 24 months old. They open slowly over the next year or so to release the seeds, opening to 9-18 cm broad. The seeds are 8-9 mm long, with a 40 mm wing, and are wind-dispersed.



TRUNK/BARK



BRANCHING



LEAVES



**F
R
U
I
T**



□ **USES**

- The aromatic wood of *Pinus longifolia* is used in Hindu medicine. The tree yields an oleo-resin called *sarala drava*, *srivasa* and *kshira* in Sanskrit. In the vernacular it is called *gandha-birozd*.
- The wood of *Pinus longifolia* is considered stimulant, diaphoretic and useful in burning of the body, cough, fainting, and ulcerations; it is generally used in combination with other medicines.
- The oleo-resin or crude turpentine is used in the preparation of plasters, ointments, and pastiles for fumigation. It is applied to buboes and abscesses for promoting absorption.
- This species of pine tree reaches a large girth, the bark forms flat patches which can be broken off in chunks (of about 8 inches square by 2 inches thick). It has a layered structure like plywood, but the individual layers have no *grain*. The locals use this easily carvable bark to make useful items like lids for vessels. Blacksmiths use this bark exclusively as the fuel for their furnaces.



- Old trees which die from fire or drying out, undergo some metamorphosis in their wood due to the crystallization of the resin inside the heart wood. This makes the wood become brightly colored (various shades from translucent yellow to dark red) and very aromatic with a brittle, glassy feel. This form of wood known as *Jhukti* by the locals is very easy to ignite (It never gets wet or waterlogged). They use it for starting fires and even for lighting, as a small piece of this burns for a long time (owing to the high resin content).

- The dried needles of this tree forms a dense carpet on the forest floor, which the locals gather in large bundles to serve as bedding for their cattle, for the year round. The green needles are also used to make tiny hand brooms.

□ **USES IN LANDSCAPE**

- It is used as an ornamental tree, planted in parks and gardens in hot dry areas, where its heat and drought tolerance is valued.

