

Geographical distribution of *Alstonia scholaris* R. Br. with its medicinal importance

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Abstract

In this article is studied about geographical distribution with its medicinal importance. It belongs to family Apocynaceae. Plant is widely cultivated throughout India. It is found in sub-Himalayan tract, West Bengal, Bihar, Peninsular India and Andamans. Tree occurs throughout the country and also planted in public gardens, houses and along road sides. *Alstonia scholaris* occurs commonly in the area.

Keywords: *Alstonia scholaris*, Medicinal Importance

Introduction

According to Drury, the name "scholaris" is derived from the fact that its planks, when sanded, were used by school children for tracing letters. It is largely used in India for skin disorders and as a febrifuge. The natives have a superstitious reverence for this tree, believing that all the forest trees assemble once a year to pay homage to it (Dymock). This bark is largely used by the natives of India (where it is official in the Pharmacopoeia), as a remedy for bowel disorders, and to restore the tone of the gastrointestinal tract after exhausting sickness, as from fever (Maiden). Woolen and cotton cloths are dyed various shades of yellow with this bark. The devil tree has been used as an astringent in ayurvedic medical science. It is known for its astringent like properties. It is anthelmintic, anticholeric, antispasmodic, astringent, emmenagogue, febrifuge, tonic and vulnerary. The tonic made of this tree is used as a febrifuge, anti choleric, vulnerary and emmenagogue. It is used to treat bowel complaints, abdominal pains, fevers and irregular menstruation, and has proved a valuable remedy for chronic diarrhoea and the advanced stages of dysentery.

Geographical description of plant

This tree is native to China, India, Nepal, Pakistan, Bangladesh, Sri Lanka, Myanmar, Vietnam, New Guinea and Philippines. From India and Sri Lanka to Southern China, in Southeast Asia countries, Malesia (Type), Bismarck Archipelago, the Solomon Islands, Laos (Kham - mouan and widespread in several provinces). *Alstonia scholaris* is also known as the blackboard tree, Ditabark, Milkwood pine, Pulai, White Cheesewood and Pala. This evergreen tree is native to the Indian subcontinent and parts of Indonesia, Malaysia as well as Australia.

Description of plant

The *Alstonia scholaris* is a tree and grows up to 40 m (130 ft) tall. Its mature bark is grayish and its young branches are copiously marked. This tree is glabrous and its leaves occur in whorls of petioles which are 1 to 3 cm. The leaves are leathery to touch and have a narrow spatulate. The flowers bloom in the month of October and smell similar to that of *Cestrum Nocturnum*. The seeds of the *Alstonia scholaris* are oblong and have margins.



Alstonia scholaris R.Br.

Chemical composition

The most active alkaloids are echitamine, ditamine and ditaine are excellent substitute for cinchona and quinine. It contains three alkaloids, Ditamine, Echitamine or Ditaine, and Echitenines, and several fatty and resinous substances- the second is the strongest base and resembles ammonia in chemical characters.

Therapeutic uses of plant

This tree has an indigenous system of medicine and used as a tonic. The plant is used as a drug which helps in restoring the digestive system. The *Alstonia scholaris* is also useful in relieving fevers and skin ailments. The bark is a bitter, astringent, alterative herb that lowers fevers, relaxes spasms, stimulates lactation and expels intestinal worms.

The bark of tree is applied to relieve malarial fever. The juice of the bark is used to relieve sores, ulcers, rheumatism and tooth pains, the tree is a substitute for quinine and cinchona. The paste prepared from the bark of the plant and it applied on wounds. The powder of bark is applied to relieve pain in the abdomen and lumps. The twigs of the plant are used as a toothbrush, it has antibacterial properties. It is applied to improve appetite of new mothers. The plant increases lactation in new mothers. The fruits of the plant relieve psychosis as well as epilepsy. Bark of the tree mixed with Ginger is applied to relief in fever to a child. The plant is applied for relieving

leprosy. *Alstonia scholaris* is used as relieved for Enlarged spleen. The paste of the bark of the evergreen tree is applied to relieve chronic arthritis. Plant is useful in relieving dyspnoea. The powder of the flower is applied in case of headaches. The plant is applied for relieving leprosy. *Alstonia scholaris* is used as relieved for Enlarged spleen. It is applied widely for relieving the problem of irregular and remittent fevers. The powdered of bark is applied to relieve bowel dysfunctions. It helps in relieving indigestion and balances the mucous in the body. It is effect in cases of chronic dysentery and diarrhea. The extract from the tree is applied in relieving acne, eczema and ringworm.

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