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## Miraculous medicinal properties of Bamboo: a Review

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### Abstract

The bamboo is a most important plant of the grasses family *Gramineae* (*Poaceae*) with subfamily *Bambusoideae*. Bamboo is the second harvest plant after the China, making up nearly 12.5% of forest covered by Bamboo. The diversity of bamboos in the world is approximately 1400 species with 116 genera. Now there is 11.4 million hectare areas of bamboo covered in India. Out of that 129 species with 18 genera are found in India. In India there are 98 bamboo species found only in North east. In many properties of bamboo, one of the most important properties is the treatment of incurable diseases. The bamboos are considered phlegm, calming, cooling, resolving. In ancient times, Chinese books were written on slats of bamboo and since ancient times, bamboo has been used as a great source of medicine. Therefore it is now necessary to review the medicinal properties of bamboo.

**Keywords:** Bamboo, medicinal value, phlegm resolving, tabasheer

### Introduction

Bamboo is the largest grass in the world which is related of the family *Gramineae* (*Poaceae*) with subfamily *Bambusoideae*. Since Ancient time Bamboo species have been used by human kind for use as a Building materials, but In China use for medicinal purposes. Botanically Bamboos is a Grass length can vary depends upon the variety or species. Some bamboos are short as 30 centimetres while giant timber bamboo can grow up to height of 4000 centimetre or 100ft. Bamboo can grow in hilly, high altitude mountain regions, plain area and in most kind of soils except desert, marsh and alkaline soils [1]. As in other grasses in the bamboos, the intermodal regions of the stem are hollow and the vascular bundles in the cross-section are scattered throughout of the stem instead of in a cylindrical arrangement so in this region bamboos considered as a grass. The bamboos leaves are oval with monocot stem including the palms and large bamboos, to be columnar rather than tapering [1]. The life of bamboos are not very long it's about only 20 years and its flower once every 7-120 years depending on the species. Out of that 129 species with 18 genera are found in India. In India there are 98 bamboo species found only in North east region like Manipur, Mizoram, Assam & Tripura etc. The name Bamboo came from kannad word (Commonly used in Karnataka state of India) "Baamboo". The bamboo a type of grass, is the fastest growing plant in the world. In India 11.4 million hectares are covered with bamboo which is second harvest plant after the china. We know that bamboo have 1250 species under the 75 genera all over in the world. In the country of China this plant known as – zhu. In Bamboo with slightly differing applications, the shaved young shoots, the resin (both fluid and dried), and the leaves are all of medicinal value. Since Ancient time Bamboo played a significant role in Human civilization the plant of Bamboo plant used as a wood in construction work at building, fiber and paper, furniture, utensils etc. Now Bamboo is being used in many areas like Source of fuel, ethanol, shoots are making delicious food (Mainly Jharkhand, Bihar & Chhattisgarh state) & fodder for animal like panda. Now Bamboo plant is a very famous as a *feng shui*. For the treatment of cough, fever & leprosy the leaves of Bambusa are used as folk medicine. So we can say that many species of bamboo are used as sources of medicinal products. *B. Arundinacea* is great source of antifertility, antimicrobial, anti-inflammatory activities. The bamboo is considered phlegm, calming, cooling, resolving. In ancient times, Chinese books were written on slats of bamboo and since ancient times, bamboo has been used as a great source of medicine. The bamboo can be also used as a dietary supplement, cosmetic ingredients pharmaceutical intermediate and food additive [2]. Therefore it is now necessary to review the medicinal properties of bamboo.

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### Morphological character

The plant of bamboo is a perennial evergreen a very tall and woody grass. The Bamboo divided in to two important parts one is Rhizomes and another are culms. The rhizome is the underground part of the stem, where is jointed stem called a culm. each culm segment begins and end with a solid joint called a node, the segment between the nodes are called internodes. From the nodes grow leaves and branches. Most of bamboo culms are hollow and cylindrical with the diameters ranging from 0.25 to 12 inches with the height of 1feet to 120 feet <sup>[3]</sup>.

### Ethanomedical uses of Bamboo

According to Kani tribes the seed of *B. Arundinaceae* enhance the fertility so it's increased the demand of seeds of this species in pharmaceutical industry to manufacture drugs to improve fertility. For the strengthening the cartilage in osteoarthritis and osteoporosis Bambusa leaf juice is used by the local people. The saps of bamboo are used for the treatment of loss of consciousness associated with phlegm-heat, resolve phlegm, cold and fever. In China tall bamboo has slightly bitter, fidgeting, lung inflammation, pungent taste is used in treating fever <sup>[4]</sup>. It has an important role in the integrity of bones, skin teeth, gums, hair, nails arterial walls and has been used to alleviate eczema and psoriasis <sup>[5]</sup>.

### Bamboo as a medicine

In the ancient times Chinese are used bamboo plants for treatment of many diseases like- Bamboo shavings (Chinese-*zhuru*) the outer surface of bamboo rod is shaved off; the middle layer of the rod is then shaved into long, thin slices that are used. It has a white-greenish appearance and used in acute fevers, a convulsion, bleeding due to heat, vomiting sweet, slightly cold, clears heat and resolves phlegm etc. Bamboos tabasheer (or tabashir); bamboo sap are very popular for used in remedies for children's feverish disorders and epilepsy. Also Tabasheer are used in sweet, cold, clears heat, resolves phlegm, anti-convulsive; used in convulsion, fever, or loss of consciousness associated with phlegm-heat etc.

### Bamboo in skin care

Bamboo extract is a rich source of silica, an essential nutrient for us that keeps the skin and hair healthy. Finely crushed bamboo powder is used in the cleaner and scrub as an exfoliant. Bamboo made powder, which are very soft, are less rigid than other powders that give less irritating to sensitive skin.

### Bamboo salts

It sounds very unusual to hear that Bamboo salts have been used too as a medicine. Bamboo salts generally prepared under the instruction of Intangible Cultural Property in this way Sundried salt with bamboo are burned and melted 850 – 1500 degree Centigrade in clay furnace by pine tree. This process is executed up to 3-9 times. During final burning at 1,500 degree C, this salt is melted completely. So Bamboo Salt believe is unique in the world. Bamboo salts manufactured very common in Korea country. 9 times or 3 times burned and melted Purple Bamboo Salt is good for health and 1 time burned Bamboo Salt for flavouring cooking normally. Now in Korea country so many uses the Bamboo Salt as Ingredient for Bathing soap, Face mask pack, vagina detergent, Toothpaste, bakery, & confectionery also.

Some important Medicinal properties of Bamboo are flowing:

- In Black Bamboo (*Phyllostachys nigra*) contain the silica in their stem so Stems are especially strong. It occurs inside the lower internodes a silica-like substance called which is known as *tabisheer* or in the Chinese language called its “Tian zhu huang” is used in a manner similar to the dried sap.
- Some important bamboo variety like *Phyllostachys henonis*' grown in Korea where this bamboo has a so many medicinal value specially for prevent the excessive salivation, respiratory disease, Hemoptysis, pulmonary strophy and acute infections.
- The abnormalities such as Specific anti-inflammatory and tonic for the lungs the bamboo *tabisheer* is considered for cure.
- Bamboo plant used as a treatment of many diseases such as-Febrifuge, sweet, diueretic, calming, vomiting control & expectorant and bacterial infection also etc.
- Herbalism it is consider as a tonic in Ayurvedic System.
- We know very well about *Sitopaladi Churn* which is commonly used for Prevention of cough & colds, Asthma and bronchitis. It is prepared from a variety of ingredients such as-Eight parts Bamboo Tabisheer which is powdered form, Four Parts Black pepper, Two Parts Cardamom, and last one is one part of cinnamon.
- The Bamboo plant and some other variety are also used for treat the lung inflammations and childhood convulsions etc.
- For the treatment of convulsions caused by phlegm and heat, phlegm that is difficult to expectorate, spasms like abnormalities are also treated with bamboo.

### Bamboo Leaf: As a Source for medicine

- The Bamboo leaf is very important for prevention of chest and head colds, it is considered diuretic and antipyretic.
- *Phyllostachys bambusoides* & *Lophatheri gracilis* is the best example for used their leaves & Stem also.
- The leaves of Bamboo moso (Gramineae) are used for arthritis.
- The Bamboo Leaf – “Lophatherum” mix with shavings of bamboo providing a cooling effect and also used in cases of stomach heat.
- In the case of pharyngitis and stomatitis the Bamboo leaves are used for with action being to encourage the flow of urine and suppression of fever.
- The Bamboo stem is considered so many disease controllers like antitussive, expectorant, sedative & antipyretic. Example of some variety are Bamboo Dwarf (*Lophatheri gracilis*) etc.
- The Bamboo bark is also used as a styptic to stop bleeding ex. Bamboo Palm (*Palmae.*) The Bamboo Palm is grown world-wide as an ornamental but is Native to China.

### Bamboo Stem & Bark: As a source for medicine

- The Juice of Bamboo stem is also used for many diseases like antitussive, catarrhal, antipyretic, expectorant and sedative and has also uses for cerebral infections.
- The stem of Bamboo Moso has been used for nausea and sour stomachic.
- In the condition of epidermis antiemetic the stem bark of bamboo is considered more important.

### Bamboo Roots: As a source for medicine

- The Roots of Bamboo are also used for many diseases

like restrict secretions of bodily fluids & the roots check blood flow also.

- The Roots of Bamboo are also used for rabies (Mad dog bites).
- The roots of bamboo have more important properties like styptic, astringent, antipyretic, and diuretic etc.
- Some different types of disease like general restlessness, Prevention of fever, sleeping problems & Decoction form for anxiety the bamboo roots are also used for this type of problems.

All the above review on the topic of “miraculous medicinal properties of bamboo” is get to attention of Environmentalist, Forest workers & Researcher, Teachers, scholars & Farmers for giving more emphasis to the different part of bamboo, Because bamboo is not only for the source of timber and source of fuel plant rather good sources of medicine also.

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