



A SYSTEMIC REVIEW ON BHALLATAKA - AN AYURVEDIC MEDICINAL PLANT

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ABSTRACT

Semecarpus anacardium Linn is a member of the Anacardiaceae plant family. The marking nut tree is another name for this tree. Despite being a toxic plant, the Ayurvedic medical system has recommended using its fruits and other beneficial portions for the treatment of haemorrhoids, worms, irritable bowel syndrome, constipation, ascites, bronchitis, skin disorders, acute rheumatism, and other ailments. The *Semecarpus anacardium* Linn. may also have analgesic, anti-cancer, anti-helminthic, anti-inflammatory, and anti-oxidant effects. Semecarpol (monohydroxy phenol) and Bhilawanol (o-dihydroxy compound), the active components found in *Semecarpus anacardium* Linn, have been shown to be mostly responsible for the therapeutic potentials. This page's main objective is to showcase the most recent research on Bhallataka's (*Semecarpus anacardium*) ability to treat a range of illnesses. This article's main objective is to showcase the most recent research on Bhallataka's (*Semecarpus anacardium*) therapeutic potential against a range of illnesses.

KEYWORDS - Bhallataka, *Semecarpus anacardium*, Diseases, etc.

INTRODUCTION

The Anacardiaceae family includes the plant bhallataka (*Semecarpus anacardium* Linn.), also known as marking nut, dhobi nut, bhilawa, and biba. One of the best, most beneficial, and most widely used herbs for natural cures. It has been used for centuries all throughout India. The ayurvedic traditions of old held it in high respect. It is a plant that is widely known for its great medicinal value in Ayurveda and for being effective in the treatment of a number of diseases. The epithet "bhallataka" refers to the plant's keen quality. Bhallataka's hot potency, light, and sharpness features offer quicker relief and also have a host of other advantageous effects.¹

Bhallataka is used both internally and externally (fruit should be purified before consumption or application of the helpful component of Bhallataka). Before taking Bhallataka as a treatment, they must go through a process called as shodhansankara since it is one of the irritating organic vegetable toxins. This process reduces the toxicity of bhallataka while increasing its therapeutic potential. There are several ballataka recipes in the Charak

Samhita. The properties of vessels, fruits, and medicinal oil from Bhallataka are recorded in the Sushrut Samhita. Several bhallataka formulations are detailed in bhaishajyaratnawali. Bhallataka is one of the main medications used in Ayurvedic treatment.²

DESCRIPTION OF BHALLATAK PLANT

This tree may be found in abundance in the drier parts of India, from the Sutlej to Sikkim, and in the outer Himalaya. *Semecarpus anacardium* is a medium-sized deciduous tree that may reach heights of 12 to 15 meters and girths of 1.25 meters. The fruits, which are also called marking nuts, are utilized medicinally. The tree's fruit is a nut, which often has a heart-shaped appearance, a rough base protrusion, and an edible kernel within. Blackberry oil, also known as bhilawan oil, is produced by the pericarp of the nut and has been used as writing ink in Malaya or India when mixed with lime water or alum. The leaves are large, closely grouped, obviate-oblong in form, and rounded at the tip.³

AYURVEDIC PROPERTIES

In addition to having a hot potency, bhallataka also has a sweet and astringent flavor (rasa), a sweet aftertaste (vipaka), and a sweet post-digestive influence (veerya). It bears the attributes of light (laghu), unctuous (snigdha), sharp (teekshna), and hot (ushna), and is entirely devoid of the kapha and vatadoshas. It is an effective herb for generating heat, digestion, rejuvenation, aphrodisiacs, and treating skin and rheumatic disorders.⁴

ANCIENT APPLICATION

In ancient systems of medicine, bhallataka is reportedly utilized for hair care, particularly according to the Ramayana. Additionally, it is employed in traditional medicine to dye hair and promote hair growth. Additionally used to cauterize rheumatoid arthritis-related joint pain and swelling⁵

CHEMICAL COMPOSITION

The nut's kernel contains just a little amount of delectable oil. The fruit's pericarp contains a strong, bitter astringent component that is utilized as a mark-replacement agent all across India. The tarry oil found in the pericarp's black, acidic juice is made up of 90% anacardiac acid, a higher, non-volatile alcohol, and 10% cardol. Naidu (1925) extracted catechol, a monohydroxyphenol he termed anacardol, two acids, and a fixed oil from the nut's kernel. Vesicating oil, which is 32% soluble in ether and becomes black when exposed to air, is also present in the pericarp. By gradually extracting crushed fruit (pericarp and kernel) with light oil, alcohol, and water, 2.14 percent of the fruit's ash is produced. The ability to isolate the following products has been found.⁶

The composition of the medication was recently examined by Pillay and Siddiqui (1931). The following components might be extracted from the pericarp juice. Chemical and photochemical analysis of its nut has revealed that it includes flavonoids, tannins, carbohydrates, proteins, and steroids. In the past, linen labels have been made from the fluid that is plentiful in the pericarp of the *semecarpusanacardium* fruit and is black, oily, bitter, and exceedingly vesicant. The commercially available vesicant juice known as Bhilawan Shell Liquid is rich in phenols.⁷

MEDICINAL USES

Aphrodisiac, carminative, diuretic, antihelminthic, liver and heart stimulant, diuretic, nervinetonic, aphrodisiac, and rasayana are just a few of the health advantages of bhallataka. Bhallataka is used both internally and outside. The fruit, its oil, and its seeds are used to cure a wide range of illnesses due to its significant therapeutic potential. According to legend, *S. anacardium*'s bitter, fiery, antihelminthic fruit can treat ascites, tumors, warts, acute rheumatism, asthma, neuralgia, epilepsy, and psoriasis. Rarely and with very caution, it is used externally as a vesicant for rheumatism, sprains, eczema, leprosy, and other skin conditions. The kernel is a nutritious food that also makes a great appetizer, aids with digestion, and acts as a carminative.⁸

PHARMACOLOGICAL ACTIVITY

ANTI- ONCOGENIC ACTIVITY

The fruit's extracts are effective in tissue culture against human nasopharyngeal epidermoid cancer, according to biological tests. According to experimental studies on the anti-cancer effect of nut juice, oral administration to cancer patients, especially those with oesophageal and mouth cancer, is beneficial in terms of offering clinical improvement, symptom relief, and increasing life spans.⁹

ANTI –INFLAMMATORY ACTIVITY

The anti-inflammatory properties of SA nut extract on newly diagnosed and established adjuvant arthritis. *Semecarpusanacardium* significantly decreased the carrageenan- and cotton pellet-induced paw edema. These results show the considerable anti-inflammatory effects and therapeutic effectiveness of *Semecarpus anacardium*. Nut extract is as effective as indomethacin at reducing inflammation at all stages.¹⁰

ANTI –BACTERIAL ACTIVITY

The juice of the pericarp contains antibacterial properties. Arsenic derivatives and bhi-lawanol sulphonates do not vesiculate. Some of them show detectable bactericidal action against *Bacillus pyogenes*, *B. coli*, *Staphylococcus*, and *Streptococcus pneumaticus* at doses of 1 in 5000–15000.¹¹

DISCUSSION

Semecarpus anacardium have been used to treat illnesses all across the world since the birth of civilisation. *Semecarpus anacardium* has a wide spectrum of pharmacological activities, according to the thorough assessment of the literature. It is highly valued among herbs and has a wide range of biological potentials. It also presents many opportunities for brand-new study fields. The fruit extract exhibits a variety of effects, including antibacterial, anti-cancer, anti-inflammatory, anti-arterogenic, anti-oxidant, promoter of hair growth, and many more. To comprehend its traditional use and validate its activity and mechanism of action for human welfare and survival, *Semecarpus anacardium* needs more research and development.¹²

TOXICITY

Since bhallataka is so hot and spiky, it should only be used occasionally. Anyone experiencing an allergic reaction should stop using Bhallataka right away. It shouldn't be used by young children, those who are very old, pregnant women, or persons whose constitutions are mostly pitta. Throughout the summer, only sometimes should the same be applied. Coconut oil, rala ointment, ghee, coriander leaf pulp, or butter mixed with musta (*Cyperus rotundus*) are the antidotes applied externally for its unpleasant reactions, including rash, itching, and swelling. Avoiding the sun, heat, and excessive sex is suggested when seeking therapy for Bhallataka. Limitations on salt and spices should also be quite rigorous.¹³

CONCLUSION

There are several medical applications for *Semecarpus anacardium*. The antiatherogenic, anti-inflammatory, antioxidant, antibacterial, anti-reproductive, CNS stimulant, hypoglycemic, anticarcinogenic, and hair growth promoter qualities of the fruit and nut extract are only a few of its many benefits. Further research is necessary to further understand the plant's traditional uses, as well as the following validation of activity and the mechanism of action.

CONFLICT OF INTEREST –NIL

SOURCE OF SUPPORT -NIL

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