

A REVIEW ARTICLE ON MOONGILUPPU (BAMBOO SILICA) IN FIELD OF AYUSH.

K. Jeba Nesam¹, G.Femil Samuel², M.Ligitha Priyadarshini.³

¹ PG Scholar, Dept. of forensic medicine and toxicology, Government siddha medical college, Palayamkottai, Tirunelveli, India.

² PG Scholar, Dept. of forensic medicine and toxicology, Government siddha medical college, Palayamkottai, Tirunelveli, India.

³ PG Scholar, Dept. of forensic medicine and toxicology, Government siddha medical college, Palayamkottai, Tirunelveli, India.

ABSTRACT

The siddha system of medicine is a traditional system generated from Dravidian culture. The unique nature of this system is its continuous service to humanity for more than 5000 years combating diseases and maintaining physical and mental health. In this system plants are predominantly used to prepare various medicines. One such plant is Bamboo. Moongiluppu or bamboo silica derived from this plant is used to prepare drugs used to treat certain diseases. It is also called tabasheer. Though this drug is not extensively used in siddha medicine it is still under research. Here we will discuss the role played by moongiluppu in our system of medicine.

KEYWORDS

Siddha medicine, Tabasheer, Moongiluppu, Bambusaarundinacea.


INTRODUCTION

Moongiluppu is the exudate found in interior stalks or nodal joints of female bamboo plants. It consists of 90% of silica, vegetablematter, potash, alumina, cholin, betain, nuclease, proteolytic enzyme and traces of lime. Although many species of bamboo produce bamboo silica, the species *Bambusa arundinacea* is mostly used for moongiluppu extraction.

ETYMOLOGY

Moongiluppu is referred to as *Tvaksheera* in Sanskrit, which means bark milk. Other Sanskrit-derived names have been applied to moongiluppu as well, including bamboo sugar (*vans-sharkar*) and bamboo silica.

CLASSIFICATION



Kingdom	: plantae
Division	: Angiosperms
Class	: Monocots
Order	: Poales
Family	: Poaceae
Genus	: Bambusa
Species	: Bambusa arundinacea

VERNACULAR NAMES

Sanskrit	: <i>vansa, vamsalavanam.</i>
English	: bamboo
Bengali	: <i>bans</i>
Gujarati	: <i>wans</i>
Telugu	: <i>bonga, vedurubeem</i>
Assamese	: <i>bnah</i>



Fig : Sample of moongiluppu

VARIETIES

There are two types of moongiluppu. One type is blue in colour and the other type is white in colour.

HISTORY

Although a part of the ancient Indian systems of medicine, it has been postulated that the use of moongiluppu originated in the Adivasi aboriginal tribes of India. Moongiluppu was extensively exported from India for thousands of years, including through Arab traders during the medieval period. The town of Thane, close to the west coast of India, was famous as a clearing center for moongiluppu in the twelfth century CE.

HABITAT

It is commonly found in central and southern parts of India, cultivated in Bengal and north western India.

ACTION

Leaves are emmenagogue and anthelmintic. Moongiluppu is used as a stimulant, astringent, febrifuge, tonic, cooling, anti-spasmodic and aphrodisiac. It helps in vomiting, palpitation, coma. It acts as a tonic for heart and liver.

EXTRACTION

Not all bamboo stems contain moongiluppu. Likely candidates are found by shaking bamboo stems, which can make the mineralized moongiluppu inside produce a rattling sound. These stems are split open to extract the moongiluppu.

MOONGILUPPU BENEFITS

When it comes to the sources of naturally occurring, organic silica, horsetail grass and bamboo are the most known two. From the eyes of Chinese, bamboo shoots are more than just a food since eating them has a long history there. In fact they have become a delicious dish on the table since the Shang Dynasty, about thousands of years ago. Now modern scientific findings seem provide a proven reason – the amount of silica contained in bamboo are about 10 times of that of horsetail herb. If you are familiar with horsetail grass, you will know that quite well what means behind that figure. No wonder Enerex Bamboo Silica, a pure silica supplement extracted from its shoots, is so popular these days for hair growth, healthy joint, and skin health.

In addition, both Succus bambusae and moongiluppu can be used in the treatment of fever or phlegm-heat induced infantile convulsions, epilepsy, stroke, coma, gurgling with sputum in throat since it possesses the calming properties. So, what is the difference between them? First and foremost, moongiluppu has preferable calming power, which makes it do a better job in treating convulsions in children and coma due to high heat; besides, since Succus bambusae is of cold, slippery nature and with better ability of clearing heat and eliminating phlegm, it is mostly used in the adult's epilepsy, stroke, and lung-heat induced stubborn sticky phlegm that is hard to cough up; last but not least, it is good at clearing heart heat to relieve restlessness. As a result, it is used more in the treatment of irritability and insomnia caused by phlegm heat disturbing the heart.

In the book Gunapadam mooligai vaguppu a choornam containing bamboo silica, longpepper, cardamom and cloves is used for treating cough and asthma.

As a very important ingredient in many medicines, moongiluppu has a wide variety of applications:

- aphrodisiac in Indian, Chinese, and other Asian cultures
- asthma treatment calms mind and benefits eyes childhood convulsive disease clears away heat and cools the blood
- clears obscuration from the heart, mind, and lungs
- coma and stroke rehabilitation
- cooling tonic irritability and sleeplessness
- medicine for the cure of bilious vomiting, bloody flux, piles, and various other diseases in the East Indies
- poison antidote
- relieves cough and eliminates phlegm
- stimulant treats and cures paralytic complaints in Indian culture
- treats spasms and convulsions due to phlegm

CLINICAL MOONGILUPPU RESEARCH

- Moongiluppu-based granule has significant effect on the treatment of psoriasis;
- The ointment made of hypocrellin A, isolated from *Hypocrellabambusae*, can be applied to female genital lesions and hypertrophic scars. And it has definite therapeutic effect under lights
- A spray made of the mixture of hypocrellin A and B can be used in topical treatment of burns. For the early stage of the superficial second-degree burn wounds, it has the advantages of fast film-forming properties, good air permeability, and quick wound healing.

MOONGILUPPU SIDE EFFECTS, DRUG INTERACTIONS AND CONTRAINDICATIONS

It shouldn't be used during pregnancy and in patients with skin diseases like onychomycosis, tinea manuum, etc. And don't eat radishes and sour and spicy food during the medication. Besides, beware of the adulterants, which have been found in the market in recent years. The adulterants are often doped with minerals that are with no genuine healing power of moongiluppu. What's worse, it may even lead to unexpected adverse reactions.

PREPARATIONS CONTAINING MOONGILUPPU

1. **MOONGILUPPU CHOORANAM** (Take all the ingredients listed below in required amount in grams and make them into powder.)

Ingredients	Weights in grams
Elarisi	35 grams
Moongiluppu	35 grams
Palm jaggery	35 grams
Tinosporacordifolia	35 grams

Table: Ingredients required for Moongiluppuchooranam

DOSE

Twice a day with milk.

DISEASES CURED

Thirst due to diabetes and syphilis.

- **Sigitcharatnatheebam ,part 2 , eighth edition.**

2. **PRABHAKARVATI**

It is a tablet given for the treatment of heart diseases in siddha and ayurveda.

Ingredients

- Bhasmaof Copper-Iron Pyrite
- LohaBhasma – Bhasma prepared from Iron
- AbhrakaBhasma – Purified and processed Mica
- Moongiluppu – Bambusaarundinacea
- ShuddhaShilajatu – Asphaltum
- Water decoction of Arjuna – terminaliaarjuna

Fine powder of above ingredients and pass them through a sieve. Now prepare a decoction of arjuna by adding four times water, soak and heat until the water becomes one fourth. Now the above powder is triturated with decoction of Arjuna, semisolid mass is prepared, and pills are made.

PrabhakarVati Benefits: It is used in Ayurvedic treatment of heart diseases. It acts as cardiac tonic. It is also used as general co-prescription in many cardiac ailments.

Effect on Tridosha – balances Vata and Kapha.

PrabhakarVati dosage: 125 mg – 250 mg, once or twice a day, after food or as directed by Ayurvedic or siddha doctor.

PRABHAKAR VATI SIDE EFFECTS:

This product should only be taken under strict medical supervision. Since it is indicated in cardiac diseases, self medication with this product may cause serious side effects. It is not suitable for pregnant and lactating mothers.

-Shukla Amit Kumar¹, Prasad Kamleshwar², Singh Madhu³ Efficacy of Prabhakar vati in the management of Hridayroga, International Ayurvedic Medical Journal, (ISSN: 2320 5091) (March, 2017) 5 (3)

3. SEETHOBALATHICHOORNAM

Ingredients	Weights in grams
Karkandu	560 gm
Moongiluppu	280 gm
Thippili	140 gm
Elarisi	70 gm
Lavangapattai	35 gm

Table:Ingredients required for Seethobalathichoornam

METHOD OF PREPARATION:

All these 5 ingredients are purified separately and then made into fine powder by the use of a mortar (kalural).

DOSE: 1/4 thola(3 grams)

ADJUVANT: milk

DISEASES CURED: Tuberculosis,chroniccough,hypertension,vomiting.

-Sigitcharatnatheebam ,part 2 , eighth edition.

CONCLUSION

It can be concluded that the drug moongiluppu has various medicinal effects especially in treating diseases of the respiratory tract. Other than moongiluppu other parts of bamboo plant are also used for medicinal purposes. Although it is less often used in siddha medicine further studies and tests need to be done on this drug to utilize more benefits from it.

REFERENCE

1. Murugesamuthaliar, DIM, Gunapadam Mooligai Vaguppu (vegetable section), First Edition published by DIM&H, Chennai.
2. S. Kannusamy pillai, Sigitcharathnadheebam part 2, eighth edition, published by B. Rathna Naicker and Sons, Chennai.
3. Dr. T. V. Sambasivampillai, Dictionary based on Indian medical science, part 1, published by DIM&H, Chennai.
4. T. Pulliah, Medicinal plants of India, Regency Publications, New Delhi.
5. Nadkarni AK : Indian Materia Medica, Popular book depot, Bombay, Vol 1, 1954.
6. Shukla Amit Kumar¹, Prasad Kamleshwar², Singh Madhu³, Efficacy of Prabhakar vati in the management of Hridayroga, International Ayurvedic Medical Journal, (ISSN: 2320 5091) (March, 2017) 5 (3).