

LITERATURE REVIEW OF NYAGRODHA (*Ficus Benghalensis* Linn.)

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ABSTRACT

Nyagrodha's medicinal properties are well documented in the *Ayurvedic* text. *Nyagrodha* is the national tree of India. In Hindu culture, it is a sacred tree that symbolizes *Brahma*, *Vishnu* & *Shiva*, all three Gods of Hindus. According to *Vedas*, it checks the environmental pollution & it is one of the sources of *Laksa* (*Lac*). This article is to highlight the importance of the drug *Vata* (*Ficus benghalensis*) and references have been collected from *Vedas*, *Puranas*, *Samhitas*, and *Nighantus*. Synonyms, Vernacular names, *Gana Varga*, etc have been arranged systematically.

KEYWORDS: *Nyagrodha*, *Vata*, *Samhitas*, *nighantus*, *Ficus*, *Laksa*.

INTRODUCTION

Nyagrodha means which obstructs or which covers. In ancient literature, this plant is known as *Nyagrodha*, afterward, becoming more familiar as *Vata*, which means surrounds or encompass.



The *Vata* or *Nyagrodha* has been sometimes perplexed with the *Asvattha*. Both trees bear the synonyms *Bahupada*-many footed, and *Sikhandin* – crested. But the *Vata* is specially described as *Skandaja* – born out of the trunk. It is a large evergreen tree distributed all over India up to a height of 15-25m. A unique feature of *Vata* is its pillar-like aerial roots which form new trunks and make the tree grow laterally. The tree's bark is thick and

whitish in color, leaves are thick and oval, 4-6 inches long. Fruits are red, round spongy about 0.5-0.75 inches in diameter. Flowers are not visible in the tree. The male and female flowers are enclosed in auxiliary, sessile, depressed red fruits.

Vedas

Vedas are the oldest literature in our country. *Atharva Veda* is full of knowledge of medicinal plants. In *rig Veda* and *Sama Veda* *Nyagrodha* is not mentioned. Still, in *Rig Veda*, it appears to have been known as "Pischel", which may be recognized by its characteristics as *vata/Nyagrodha*. It is noted at various places in *Atharvaveda*. In *Atharvaveda nyagrodha* and *asvattha* both are mentioned. *Aswatha* is called the sister of *vata/nyagrodha*.

- It is said that where *nyagrodha* grows, *Gandharva* and *apsara* do not come. It shows that it can kill *krimi*. *Nyagrodha* trees were grown in Vedic times for *Vayu Mandal shuddhi*, which shows that it helps in the control of environmental pollution.

Puranas

Nyagrodha is regarded as a symbol of royal nature, because of its numerous properties. Minute fruits of the plant with hypanthium (the apparent fruits) are called *Vatakanika*. Fruits of *Nyagrodha* have similar properties to other *Ficus* fruits such as *Ashwatha*, *Udumbara*, and *Plaksha*.^[1]

Brihat-Trayees**Charak Samhita**

Vata is a tree found in *Jangala desha*^[2]

Qualities of *Nyagrodha Pallava* have been described as “*kashaya stambhanaa sheeta hitaa pittaatisaarinaam*”^[3]

Vata is used to prepare *Kashaya* and is used for *Vasti* in *Kapha vikaras* along with *Madhu taila lavana* and in *Pitta vikara*, along with *Madhu* and *Ghrita*.^[4]

Due to its *Purisha sangrahani* action, *Vata* is used in *Ativirechana*⁵. It is also used for *Vasti* in elephants.^[6]

Susruta Samhita

It is mentioned in *Bhagna chikitsa*.^[7] It is said to be used in *Kusta*⁸. It is mentioned as *Nadi rogagna dravya*.^[9] It is explained in *Mishraka chikitsa*.^[10] ie, for *Mukhamardana*. It is used in the case of *Virechana yoga*.^[11]

Astanga Hrudaya

- It is mentioned for *Putapaka*.^[12]
- It is used as a relief for *Puyashukla*.^[13]
- *Vata shrungashtaka* is used for *Garbha sthirata*.^[14]
- In *Shareera* 1st chapter *Vatasruna* (vegetative bud) along with cow's milk is indicated specially in *Stree Vandhyatwa*.^[15]

“*Nyagrodhasya prathamodhbhinna praroho Vatasungaha tasyaashtakamithi*

Sungam-prathamodhbhinna patrankuam iteendu”

- In context of *Garbha sthapana* says that,

“*Payasaa.....peetam vatasrungaashtakam tattaa*”

i.e. Eight *Vata Srunga* along with cow's milk is advised to take for the purpose of *Garbha sthapana* action.

References in other Samhitas**Bhela Samhita**

Vata along with other drugs are mentioned in *Pittatisara*¹⁶. It is mentioned to cure *Atisara*.¹⁷

Yoga Ratnakara

Yoga Ratnakara in the context of *yoniroga chikitsa* has told that.^[18] *Vatasungam* along with other drugs when given to a *Vandhya Stree*, will help in giving birth to a child. He has also commented that *Vatankura* along with other drugs is *Garbh Prada*.

Bhavamisra

In *Yoni Rogaadikaara* while explaining *Vandhya Chikitsa* he tells a women who consumes *Vatasunga* will give birth to a healthy male child without a doubt.^[19]

Kashyapa Samhita

It is mentioned as a *Dravya* to generate intellect²⁰. *Parthiva* is told to collect *Vata Sunga* to worship and to wear.^[21] It is also used to cure burning sensation.^[22] The *Vata* is used to treat *Charmadala* due to *Pitta*.^[23]

References in Nighantu

- 1) *Danwantari Nighantu*^[24]- (*Amradi Varga, Mishrakaadi varga*)
- 2) *Bhavaprakasha Nighantu*^[25]- (*Vatadi Varga, Gudoochyaadi varga*)
- 3) *Madanapala Nighantu*^[26]- (*Vatadi Varga, Abhyadi varga*)
- 4) *Kaiydeva Nighantu*^[27]- (*Ausadhi Varga*)
- 5) *Raja Nighantu*^[28]- (*Amradi, Dharanyadi, Ausadhi and Mishrakaadi varga*)
- 6) *Shaligrama Nighantu*^[29]- (*VatadiVarga*)
- 7) *Priya Nighantu*^[30]- (*Haritakyadi Varga*)
- 8) *Nighantu Adarsha*^[31]- Structure, vernacular name and *Nirukti* of *vata* are explained. Various *Upayoga* and *Amayika prayoga* are also mentioned.
- 9) *Hrudayadeepika Nighantu*^[32]- (*Kapha pittaghna varga*)

Nomenclature of Vata

Classical names *Vata*,

Raktaphala, Sringi, Nygrodha, Skandaja, Skandaruha, Dhruva, Ksiri, Vaisravanavasa, Bahupada, Jati, Jat ala, Avarohi, Mandali, Vitapi, Mahachaya, Yaksataru, Yaksavas, Padarohini.

Vernacular names

Arabic- Jhatule, Jaibva

Assami- Vat, Ahat, Vatgach, bot

Bengali- Bar, Bot, But

Bumese- Pyi-nyoung

English- Banyan

Gujarati- Vad, Vadlo, Vor

Hindi- Bat, Bargada, Bada, Bor, Ber

Kannad- Ala, Alada, Mara, Vata

Kashmiri- Bad

Konkan- Goeliruku

Urdu- Bargd, Bad

Telgu- Peddamari, Marri, Vata

Tamil- Alamaram, Peral, Ai, Alam

Sindhi- Wur, Bur

Santhal- Bare

Punjabi- Bor, Berabohir, Bohar, Bargad

Oriya- Bata, Bara, Born

Marathi- Vada, Wad, War

Malayalam- Peral, Vatavrksam, Ala, Vatam

CLASSIFICATION OF VATA IN TEXT

In ancient times, authors classified drugs into different *Vargas, Ganas, Skandhas* etc. The drugs are classified on the basis of their morphological characters, properties, pharmacodynamics as well as their therapeutic values. The classification of *Vata* is as follows.

Text	Gana/ Varga
<i>Charak Samhita</i>	<i>Saka varga, kashya skandha, Mutra sangrahaneeeya dravya, garbha sthapana gana</i>
<i>Sushrut samhita</i>	<i>Nyagrodadi gana</i>

Types

Charak chikitsa sthana 3/258 in the context of *Chandhanadi taila*, *Nyagrodha* and *Vata* are mentioned, it means they are different drugs. *Chakrapaani* comments that *vata nishpraroho vata ana Nyagrodhasthu prarohavaan*, ie. *Vata* without *praroha*(aerial roots), while in case of *Nyagrodha praroha*(aerial roots) are present. There are several variants of *Vata* differing in leaf shape, presence or absence of aerial roots etc.

BOTANICAL CLASSIFICATION

Kingdom- Plantae

Subkingdom- Tracheobionta- vascular plants

Superdivision- Spermatophyta- Seed plants

Division- Magnoliophyta- flowering plants

Class- Magnoliopsida- Dicotyledons

Subclass- Hamamelidae

Order- Urticales

Family- Moraceae

Genus- *Ficus*

Spices- *Bengalensis*

GEOGRAPHICAL DISTRIBUTION

It occurs all over India in the sub-Himalayan regions like rohilkhand, commonly found in Sal forests of Dehradun and Saharanpur, orissa, West Bengal, in deciduous forests of Deccan and in all districts and semi-evergreen forest of south India.

BOTANICAL DESCRIPTION

- **TREE-** large up to 30m in height
- **Bark-** greenish white
- **Leaves-** simple alternate, 10-12cm broad, reticulate venation
- **Flower-** male female and gall flowers are enclosed in receptacles Sepals are 4 and 1 stamen. Female flowers fertile erith shorter than male, style elongated Gall flowers perianth as in the male, style short
- **Fruit-** small enclosed in the commonly fleshy recepta

PARTS OF TREE USED

Stem bark, leaf, latex aerial root and fruits

CHEMICAL CONSTITUENTS

- Leucoanthocyanin,
- Two flavonoid compounds, viz, 5,7-dimethyl ether of Leucopelargonidin-3-0-alfa-1-rhamnoside and 5,3-Dimethyl ether of leucocyanidin-3-0-alpha-D-galactosyl cellobioside,
- three methyl ethers of Leucoanthocyanins-delphinidin-3-0-alpha-L-rhamnoside(1), Pelargonidin-3-0-alpha-1-rhamnoside (2), Leucocyanidin-3-0-beta-d-galactosyl cellobioside(3),
- 20-tetratriacontane-2-one, pentatriacontane- 5-one, 6-heptatraconten-10-one,
- Beta-sitosterol-alf-d-glucoside and meso-inositol,

- Tiglic acid ester of taraxasterol (heartwood),
- Quercetin-3-galactoside,
- Rutin,
- Friedelin,
- Beta-sitosterol
- And surface hydrocarbons(leaves).

PHARMACOLOGICAL ACTIVITY

- Hypoglycaemic
- Hypotensive
- Anti Infertility
- Antidiabetic
- Antioxidant
- Hypocholesterolemic

TOXICITY

Lethal dose of plant extract in mice was -9.47 gm/kg by i.p. route.

In chronic toxicity test- extract produced hepatic damage initially but changes were reversible even on continued administration.

SUBSTITUTES AND ADULTERANTS

Powder prepared from fruits of *Ficus benghalensis* is used to adulterate *kampillaka* i.e. *Mallotus philippensis* (lamk).

FORMULATIONS AND PREPARATION

Nyagrodhadi churna, *nyagrodhadi ghrita*, *sgarivadyasava*, *karanjadya ghrita*, *chadnyadi taila*, *ushirasava*.

AYURVEDIC PROPERTIES

- **Rasa-** Kasaya
- **Guna-** Guru, Ruksha
- **Virya-** Sita
- **Vipaka-** Katu
- **Doshanta-** *Kapha Pitta Shamak*

It is given in following disease

Vrana, *vipadika*, *amavata*, *sandhishotha*, *karnsrava*, *dantashula*, *arma*, *sukra rog*, *chardi*, *daha*, *raktapitta*, *atisara*, *prameha*, *charmaroga*, gonorrhoea, leucorrhoea, hyperdipsea etc.

ACTIONS

Vedanasthapan, *varnaropana*, *raktarodhak*, *sothahara*, *chakshusya*, *stambhan*, *raktashodhak*, *raktapittahara*, *sukrastambhak*, *mutrasangrahniya*, *dahaprashamana*, *garbhashthapana*.

DOSE

Decoction- 50-100ml

Powder- 3-6gm

latex- 5- 10drops

CONCLUSION

Ficus benghalensis, one of the most glorified tree from the past has properties which can cure some of the most

deadly diseases and used in the traditional system of medicine for *garbha sthambana* and *pumsavana samskar*. Review on *Vata* from different classical texts and *Nighantus* can be useful to know about the synonyms, different useful parts, formulations and therapeutic uses. Further researches are to be needed to be carried out or to explore *Vata* for its potency towards pharmacological properties and actions.

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