



REVIEW ARTICLE ON AGNIMANTHA AND ITS SPECIES.

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ABSTRACT

In classics two type of *Agnimantha* is explained as Bruhat and Kshudra *Agnimantha*. *Premna integrifolia* Linn. and *Clerodandrum phlomidis* Linn. are used as Bruhat and Kshudra *Agnimantha* respectively. Both possess the same properties according to classical text. this review is taken to highlights on all classical references and Nighantu references of *Agnimantha* and their types. Allreferencesspecially focussed on their synonyms, Guna(properties), Karma(action) and Prayojang(part used) Pharmacognostical reviews are also taken from modern standard Ayurvedic and botanical books and also try to solve the controversies about reference *Agnimantha-davya*.

KEYWORDS: *Premna integrifolia* Linn, *Clerodandrum phlomidis* Linn.

INTRODUCTION

Brihatrayi and Laghutrayi have given scientific description about the drugs. They introduced the drugs with their Rasa, Guna, Veerya, Vipaka and Karma. They have also described other identification tools of drugs. Ayurvedic Materia Medica i.e. Nighantu, deals with various aspects of Dravyaguna. It includes various synonyms and homonyms, proper identification, collection, storage and processing of the drugs as well as properties & indication. Here a review is taken for study.

CLASSICAL REVIEW

Vedic Kala^[1]

Agnimantha is a very important plant during Vedic period wherein, its stem/sticks were used to produce fire. It is a plant considered essential for rituals also.

SAMHITA KALA

A. Charaka Samhita^[8]

Agnimantha is found to be Shothahara according to Charaka. Tarkari and *Agnimantha* are described together by Charaka in a context. *Agnimantha* is one of the Shothahara and Sheetaprashamana Mahakashaya Gana Dravya. *Agnimantha* Patra is indicated in Shushk Arsha for Avagaha Sveda.

Agnimantha and Tarkari both are indicated in Urusthambha for Seka and Lepa. It is also indicated several diseases like – Sthaulya, Jwara, Prameha, Udararoga, Arsha, Visarpa etc.

In Sutra Sthana *Agnimantha* 7 references are found, in which single reference of singly used *Agnimantha* Swarasa is found in Medoroga chikitsa with Shilajeet.

B. Sushruta Samhita^[9]

Sushruta enumerates Tarkari and *Agnimantha* separately on Varunadi Gana. Veeratarvadi Gana and in Vatasamshamana Varga, also as one of the Mahatapanchamoola and Dashamooladrugs. It is indicated as Sthoolapakarshaka, Shophahara, Agnivardhak in the context of Asadhya Kustha also mentioned in Prameha, Shlipada, & Udavarta Chikitsa.

In 38th chapter of Sutra Sthana *Agnimantha* and Tarkari comes in a same reference, and in Sushruta Sutra Sthana 46th chapter Tarkari Patra Shaka is said to be Shotha Nashak Shaka.

C. Ashtanga Hrudaya^[10]

The author used both the names Tarkari and *Agnimantha* frequently in Samhita. *Agnimantha* has indicated in Vataj Shophahara. Tarkari is mentioned in Shakavarga as Kapha Vatahara and it is indicated for Snana in Shwayathu Chikitsa. The word Tarkari is used instead of *Agnimantha* in Mahatapanchamoola of Aushadha Varga.

NIGHANTU KALA

1. Ashtanga Nighantu

The author Vagbhatacharya has kept *Agnimantha* in Varunadi Gana & gives 4 synonyms Vajyantika, Aranika, Tarkari and Jaya etc.

2. Dhanvantari Nighantu

It mentions two types of *Agnimantha* in Guduchyadi Varga-one called '*Agnimantha*' with 10 synonyms like Tarkari, Vajyantika, Jaya, etc. and second called

'Dwiteeya' with 3 synonyms namely Aranika, raktanga, manthanaandsame Guna Karmaof both species.

3. Sodhala Nighantu

Sodhala mentioned *Agnimantha* and Arani as two different varieties. The opinions that *Clerodandrum phlomidis* Linn. and *Premna integrifolia* Linn. are the botanical sources of Tarakari and *Agnimantha* respectively. This is concluded on the basis of Nadiyi which is the synonym of *Tarakari*.

4. Madanapala nighantu

Author Madanapaalad describe *Agnimanthain* 'Abhyadi Varga' as Shothahara, UshnaVeerya, Kapha-Vataharawith its 5 synonyms.

5. Raj nighantu

Narahari Pandita, mentioned '*Agnimanthdwy*' word and explained two varieties, *Agnimanthawith* 13 synonyms and Kshudra *Agnimanthawith* 7 synonyms. Guna-Karmaof both varieties is told to be same.

6. Kaiyadeva nighantu

Kaiyadeva earlier quoted that *Agnimantha* is better Sothahara and Vatahara. *Agnimantha* and Tarakari may be Laghu and Brihat species respectively. Tarkari and *Agnimanthawith* 14 common synonyms and properties of both.

7. Bhavaprakasha nighantu

Bhavamishradescribes one variety of *Agnimanthain* 'Guduchyadi Varga' with 9 synonyms and Tarkari being one of them. Ushnaveerya, Kaphavatahara and Shothahar.

8. Shaligrama Nighantu

Authorhas mentioned it in Guduchydi Vargaand told two varieties- '*Agnimantha*' with 9 and '*Kshudra Agnimantha*' with their 8 synonyms respectively.

9. Priya nighantu

P.V. Sharma mentioned it in the 'Haritakyadi Varga'. Explain the production of fire on mathana of the wood and Vatahara action of *Agnimanthadue* to ushnatwa.

CLASSIFICATION OF AGNIMANTHA^[2]

Table 01 classification of *Agnimantha*

	<i>Clerodandrum phlomidis</i> Linn.	<i>Premna integrifolia</i> Linn.
Kingdom	Plantae	Plantae
Subkingdom	Tracheobionta	Tracheobionta
Super division	Spermatophyta	Spermatophyta
Division	Magnoliphyta	Magnoliphyta
Class	Magnoliopsida	Magnoliopsida
Subclass	Asteridae	Asteridae
Order	Lamiales	Lamiales
Family	Verbenaceae	Verbenaceae
Genus	<i>Clerodandrum</i>	<i>Premna</i>
Species	<i>Phlomidis</i>	<i>Integrifolia</i>

CLASSIFICATION OF AGNIMANTHA^[3] (Ayurveda).

Udhbhava- Oudbhida (Plant Origin)

Swaroopa – Vruksha (tree)

Table 02 shows Ganas and Vargas of *Agnimantha* in Samhitas and Nighantus.

CHARAKA	Sothahara, Sitaprasamana, Anuvasanopaya
SUSHRUTA	Viratanadi, Varurvadi, Vatasamsamana
VAGHBHATA	Viratanadi, Varurvadi
RAJA NIGHANTU	Pippalyadi Varga
BHAVAPRAKASHA NIGHANTU	Haritakyadi Varga
KAIYDEVA NIGHANTU	Aushadhi Varga
ASTHANGA NIGHANTU	Varunadi Gana
DHANVANTRI NIGHANTU	Gudhuchyadi Varga
SODHAL NIGHANTU	Kushadi Varga
MADANPAL NIGHANTU	Haritakyadi Varga, Bilwadi varga
SHALIGRAM NIGHANTU	Gudhuchyadi Varga
PRIYA NIGHANTU	Haritakyadi Varga

SYNONYMS

Table 03 shows various synonyms in Nighantus.

Synonyms	A.N.	D.N.	R.N.	K.N.	BH.N.	S.N.	N.A.
Agathu	--	--	--	--	+	--	--
Agnimantha	+	+	+	+	+	+	+
Agnimanthan	--	+	+	--	--	--	--
Ananta	--	--	+	--	--	--	--
Arani	--	+	+	+	+	--	+
Aranik	--	--	--	--	+	--	--
Gandhpatra	--	--	--	--	--	+	--
Gandhpupa	--	--	--	--	--	+	--
Ganika	--	--	--	+	--	--	--
Ganikarika	--	--	--	+	+	+	+
Jay	--	--	--	--	+	--	--
Jaya	+	+	+	+	+	+	--
Jayanti	--	--	--	+	+	+	--
Jayanti	--	--	--	+	--	+	--
Karnika	--	--	+	--	+	+	+
Ketu	--	--	+	--	--	--	--
Kushanug	--	--	--	--	--	+	--
Manthan	--	--	--	+	+	--	--
Nadeyi	--	+	+		+	+	--
Pavak	--	--	--	+	--	--	--
Raktad	--	--	--	--	+	--	--
Shriparni	--	+	+	--	+	--	--
Tarkari	--	+	+	+	+	+	+
Vaijayintika	+	+	+	+	+	+	+
Vanhimanthan	--	--	--	+	+	--	--
Vijaya	--	--	+	+	--	--	--

Explanation of synonyms^[4]

- *Agnimantha/ Araniit* produces fire on churning in a hole made in the log.
- *Tarkari* it is frequently discussed or praised by people for its qualities.
- *Jaya* it conquers diseases.
- *Jayanti* cures diseases.
- *Vijaya* wins over diseases.
- *Nadeyi* occurs near the river banks.
- *Vaijayantika* it is the flag bearer on behalf of all the herbs.
- *Tejovriksha* tejayukta vriksha.

- *Shreeparni* leaves are full of wealth & health.
- *Kanika* produces characteristic sound on breaking its stem.
- *Ganikarika* grows along with other trees in groups.
- *Tejomantha* has the capacity to generate fire.

VERNACULAR NAMES^[5]

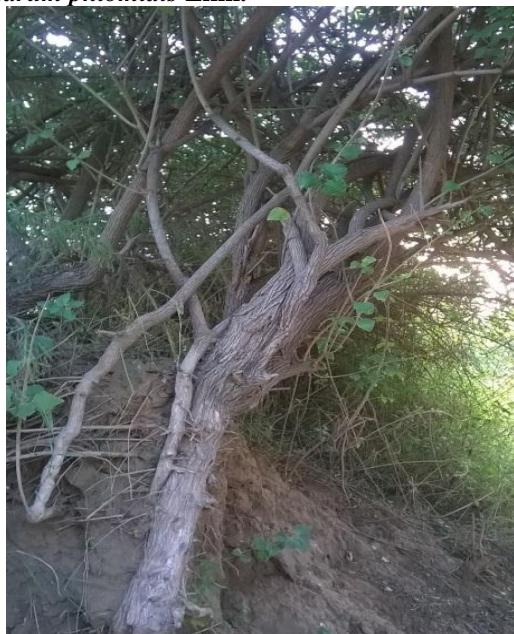
The Vernacular names of "*Agnimantha*" are as follows,

- 1) Sanskrit - *Agnimantha*, Jay, Sriparna;
- 2) French - Arbe a la migraine;
- 3) Hindi - Arni, Ganiyar, Bakar, Gin, Bharkhar, Bakaru;

- 4) Marathi - Eran, Takli;
- 5) Gujarati - Arni;
- 6) Assamese - Gainali, Gonderi, Gunaru, Gaimali gunarua;
- 7) Kannada - Agnimantha;
- 8) Oriya - Aggibathu;
- 9) Tamil - Minni, Pachumallai, Munnal, Chedi munnal, Erumailmunna;
- 10) Telugu - Kondamanga, Takli, Nelli, Peddanelli kura, Konda manga;
- 11) Malayalam - Akir, Akil.

MORPHOLOGY^[5, 16, 7]**SPECIES:** *Clerodendron phlomidis* Linn.**Synonym***Clerodendrum multiflorum* O.Kuntze.**HABIT**

A large bush or small tree, reaching 9m. High, with more or less pubescent branches.

***Clerodendrum phlomidis* Linn.**

- **Leaves:** 3.8- 6.3 by 3.2-3.8 cm. ovate or subrhomboid, obtuse or acute, coarsely crenate-dentate or subentire, undulate, glabrous.
- **Flowers:** moderate sized, fragrant, in small dichotomous axillary cymes arranged so as to form a rounded terminal panicle; bracts obovate or lanceolate, acute, leafy.
- **Calyx:** 1cm long or more, divided about half way acuminate, veined.
- **Corolla:** white or pinkish; tube 2-2.5 cm. long, slightly pubescent outside, glabrous inside;
- **Filaments:** slightly pubescent below.
- **Ovary & style** are glabrous.
- **Drupe:** 6mm, long, broadly ovoid, depressed, the top about level with the points of the persistent calyx-lobes.

HABITAT

It is found throughout the drier parts of India, specially Upper Gangetic plain, Sub-Himalayan, tracts of Rohilkhanda.

Premna integrifolia* Linn.*SPECIES:** *Premna integrifolia* Linn.**Synonyms**

- *Premna obtusifolia* R. Br.
- *Premna serratifolia* Linn.
- *Premna corymbosa* Rottl.
- *Premna spinosa* Roxb.

HABIT

- **Stem:** It has short trunk and numerous branches.
- **Bark** smooth, thin, dark brown or brownish yellow and lenticellate.
- **Wood** light cream yellow to light brown, moderately hard, feebly scented.
- **Leaves:** Simple, opposite or rarely whorled, exstipulate, dark green and shining.

- **Petiole** is 1/3 to 1/2 inch long. The size, shape and margin of the leaf shows considerable variation even in the same plant.
- **Flowers:** very small, generally less than an eighth of an inch long, bracteate, pale greenish white or greenish yellow, bisexual or polygamous, and arranged in many flowered terminal.
- **Calyx-** shallowly cupular, glabrous, persistent.
- **Corolla-** greenish yellow about twice the length of the calyx, glabrous outside, tubular, obliquely funnel-shaped or slightly bilabiate, five lobed or sub equally four lobed.
- **Stamens-** four, about the length of the calyx, rarely slightly exserted, filaments hairy at the base; anthers ovate or rounded, divergent from base;

- **Fruits:** a small globose or oblong or rarely pear shaped, entire one to four chambered and one to four seeded drupe.

HABITAT

Mostly found in the coastal areas in Southern India such Kerala & Tamilnadu & distributed near the sea from Bombay to Malaysia.

Premna integrifolia Linn.



PART USED

Table 04 shows part used of Agnimantha in Bruhtrayee.

Samhita	Moola	Patra	Twak	Panchanga	Pushpa	Other	Total
Charak	119						119
Sushrut	61	04	--	02	--	01	68
Vagbhat	116	02			01		119

KALPANA

Single use of *Agnimanthais* not used anywhere in Samhita. In Brihadtrayi, *Agnimantha* is mainly used in the formulations e.g. in the form of Kwath which is then further used for the preparation of Avaleha, Ghrita, Taila etc.

CULTIVATION AND PROPOGATION^[12, 13]

- ★ It can be propagated by seeds & root Suckers
- ★ Grows well on a variety of soil.

MATRA (DOSE)^[5]

Churna – 0.5-1 gm
Swarasa – 15-25 ml
Kwatha - 60-100 ml

PROPERTIES

Both type of *Agnimantha* possess same attributes. Table 05 shows properties of *Agnimantha* according to Nighantus.

Properties	Dh. N.	R.N.	K.N.	BH.N.	SH.N.
Rasa	Katu Tikta	Katu Tikta	Katu Tikta Kashaya Madhur	Katu Tikta Kashaya Madhur	Katu Tikta
Veerya	Ushna	Ushna	Ushna	Ushna	Ushna

KARMA^[5]

1. DOSH KARMA

- KaphaVata shamaka

- Rakta shodyihaka

2. VYADHI KARMA

Table 06 showing Vyadhi Karma of *Agnimantha*.

Deepana	Shula prashamana	Vibandha
Pachana	Dhatushoshaka	Agnimandya
Pramehaghna	Jwraghna	Adhmana
Vedanasthapana	Shotha	Mutraghata
Anulomaka	Pandu	Gulma
Madakari	Vatavyadhi	Arsha
Nidrajanana	Mutrakrechha	

CONTROVERSY

Agnimantha and 'Tarkari'. Both were having their own identity because Charak and Sushruta used both in same contexts i.e. Urustambha Chikitsa & Varunadi Ganarespectively. Vagbhata used both plants in separate texts and also mentioned Tarkari in Shakavarga. The commentators Chakrapani and Dalhana have mentioned separate synonyms for both the drugs as described earlier.

The actual confusion started from Nighantu Kala, in which common synonyms were used for both the plants. *Agnimantha* was termed as Dwiteeya or Kshudra *Agnimantha* by some of the Nighantus. In other places, both the varieties have been mentioned but with common synonyms.

c) Modern review^[2,5,6,7]

According to API & AFI, *Clerodendrum phlomidis* Linn. is taken as source plant of *Agnimantha* and also many authors like C. P. Khare, Raghuveerprasad Trivedi, Banvarilal Mishra and the book "Indian medicinal plants—An illustrated dictionary" etc. accepted the same.

Majority of the authors like Bapalala G. Vaidya, P.V. Sharma, K.C. Chuneekar, etc. consider *Premna integrifolia* Linn. as Brihat and *Clerodendrum phlomidis* Linn. as *Laghu Agnimantha*.

Premna latifolia Roxb. is also considered as another source plant for *Agnimantha* by authors like Thakur Balwantsingh, P.V. Sharma, K.C. Chuneekar, Y.K. Sarin, Raghuveerprasad Trivedi. According to C. P. Khare, it's a variety of *Agnimantha*. V.S. Agarwal considers it as substitute or adulterant of *Premna obtusifolia* R. Br. While Raghuveerprasad Trivedi opines it as Tarkari.

The Wealth of India considers *Premna obtusifolia* R. Br. as *Agnimantha* and suggests *P. integrifolia* Linn. *P. corymbosa* auct. Non Rottl. & Willd. as synonyms of *P. obtusifolia* R. Br.

Differentiation of *Agnimantha* and Tarkari with respect to sources appears to be complex. Considering the meaning of its term, the drug attributed with name *Agnimantha* should be strong and enough to produce fire on rubbing. *Premna* species are comparatively stouter than *Clerodendrum* species. Hence *Premna* species can be accepted for *Agnimantha*. Tarkari has been mentioned

in Shaka Vargaby Acharya Sushruta so *Clerodendrum* species can be considered for it.

CONCLUSION

Since there is no much difference in the qualities and applicability, it is beneficial to consider both drugs (*Agnimantha* & Tarkari) together and utilize the available sources in pharmaceuticals to avoid controversy and reduce the undue pressure on one particular drug source.

According to the data available about *Agnimantha* and majority of authors, *Clerodendrum multiflorum* (Burm.f.) O. Ktze, *Premna integrifolia*, and their synonyms can be considered as *Agnimantha* source plants.

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