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CRITICAL REVIEW ON *BRUHAT AGNIMANTHA*

(*Premna integrifolia* Linn.)

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Abstract

Premna integrifolia L. (syn. *Premna serratifolia*), commonly known as *Bruhat Agnimantha* in Ayurvedic medicine, is a versatile medicinal plant with a long-standing history of therapeutic use in traditional systems of medicine. This review aims to consolidate and critically analyze the existing literature on the phytochemistry, pharmacological activities, and ethnomedicinal significance of *P. integrifolia.* The plant is rich in a diverse array of bioactive compounds, including alkaloids, flavonoids, tannins, phenolic acids, saponins, and essential oils, which contribute to its wide spectrum of biological activities. Studies have demonstrated its antioxidant, anti-inflammatory, antimicrobial, hepatoprotective, cardioprotective, and neuroprotective properties [4]. Moreover, *P. integrifolia* is an integral component of several classical Ayurvedic formulations such as *Dashamoola.* This review also highlights the need for further phytochemical isolation, mechanistic studies, and clinical validation to fully understand *Premna integrifolia*,its therapeutic potential and pave the way for the development of novel plant-based drugs. By bringing together traditional knowledge and modern scientific research, this review underscores the importance of *Premna integrifolia* as a promising candidate in the field of phytomedicine.

Keywords: *Bruhat-Agnimantha, Premna*,*Clerodendrum*, Ayurvedic herbal medicine, Headache tree, *Arani*

Introduction

Premna integrifolia L., traditionally known as *Bruhat Agnimantha* in Ayurvedic medicine, is a plant of notable therapeutic value and cultural significance. Found abundantly across tropical and subtropical regions, especially in India, Sri Lanka, and Southeast Asia, it belongs to the Verbenaceae family and has been used for centuries in traditional healing systems. Various parts of the plant like roots, bark, leaves, and flowers have been employed to treat a wide range of ailments, including fever, inflammation, digestive disorders, and respiratory conditions. The plant's medicinal versatility is attributed to its rich phytochemical composition, which includes flavonoids, alkaloids, phenolic compounds, and essential oils [5]. These bioactive constituents have demonstrated antioxidant, antimicrobial, hepatoprotective, and anti-inflammatory properties in modern pharmacological studies, providing scientific validation for its traditional uses. Despite its promising therapeutic potential, many aspects of *Premna integrifolia* remain underexplored, particularly in terms of clinical efficacy, standardization of extracts, and understanding of its molecular mechanisms. As global interest in plant-based medicine continues to rise, this underutilized species presents a valuable opportunity for further research and drug development. By integrating traditional knowledge with contemporary scientific findings, this article aims to present a comprehensive overview of the botany, phytochemistry, pharmacological activities, and therapeutic applications of *Premna integrifolia*. It also seeks to identify key gaps in current research and encourage deeper investigation into this multifaceted medicinal resource, ultimately contributing to its recognition and utilization in modern healthcare systems.

Material and Methods:

Verbenaceae family characteristics:[6]

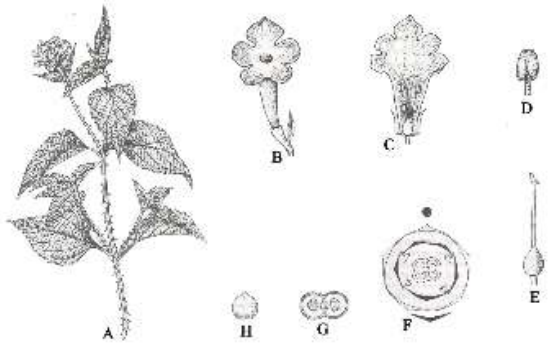

Fig.no.1 verbenaceae family chracteristics

- General Habit: Mostly herbs, shrubs, or small trees. Some are climbers (e.g., *Lippia species*). Often aromatic, but less so than Lamiaceae.
- Stem: Usually quadrangular (four-angled), especially in herbaceous species. Woody in shrubs and trees.
- Leaves: Simple or rarely pinnate, opposite or whorled. Exstipulate (no stipules). Margins may be entire, serrated, or crenate. Sometimes aromatic.
- Inflorescence: Spikes, racemes, cymes, or panicles. Often terminal or axillary.
- Flowers: Bisexual, zygomorphic (irregular). Usually pentamerous (5 sepals/petals).
- Calyx: Gamosepalous (sepals fused), 5-lobed. Often persistent. May be tubular or bell-shaped
- Corolla: Gamopetalous (petals fused), usually tubular with bilabiate or actinomorphic limb. Colorful and attractive to insects.
- Androecium (Stamens): Usually 4 stamens, didynamous (2 long + 2 short). Occasionally 2 or stamens.
- Sometimes a fifth stamen is reduced to a staminode. Epipetalous (attached to petals).
- Gynoecium (Carpels): Bicarpellary, syncarpous (fused carpels). Ovary superior, often 4-lobed, Style terminal (not gynobasic like Lamiaceae).

Fig.no.2 floral diagram of Verbenaceae family

- Fruit: drupe, capsule, or schizocarp.
- Pollination: Mostly by insects (entomophilous).
- Floral Formula: ↑ ♂ K (5) C (5) A4 G (2)
- (Actinomorphic or zygomorphic, bisexual flower, 5 united sepals, 5 united petals, 4 stamens, bicarpellary ovary)

Taxonomy:

Table no.1

Kingdom: Plantae
Division: Angiospermae
Subclass: Gamopetalae
Series-Bicarpellate
Order: Lamiales
Family: verbenaceae
Genus: Premna
Species: *Premna integrifolia Linn.*

Morphological Features [7]

Leaves: Usually opposite or whorled arrangement, Simple or palmately compound. Often aromatic due to essential oils, Presence of glandular trichomes (hairs).

Stem: Usually quadrangular (four-sided) in young branches. Sometimes woody in shrubs and trees.

Inflorescence: Usually spikes, racemes, or panicles. Flowers often in terminal or axillary clusters.

Flowers: Zygomorphic (bilaterally symmetrical) or actinomorphic (radial symmetry). Usually bisexual (having both male and female parts). Bracteate, small, and often brightly coloured.

Calyx:5-lobed or tubular. Persistent in fruit.

Corolla: Tubular or funnel-shaped, often with 5 fused petals. Irregular lobes in some species.

Androecium (Stamens): Usually 4 stamens (sometimes 2 or 5). Didynamous (two long and two short stamens).

Gynoecium (Pistil): Bicarpellary (2 fused carpels). Superior ovary, usually 4-lobed. Style terminal or gynobasic (arising from the base of the ovary).

Fruit Type: Drupe, schizocarp, or capsule. Often splits into 2–4 nutlets.

Seed: Usually small, with little endosperm.

External morphology/Macroscopic characteristics [8]

Table no.2

Part	Description	Picture
Root	The root of *Premna integrifolia Linn.* is a thick and woody taproot system, generally cylindrical in shape or sometimes slightly tortuous. Externally, it appears light brown to dark brown, while the internal surface is cream to yellowish-white. The surface is rough and wrinkled often showing the presence of lateral rootlets. It exhibits a fibrous fracture when broken. The root has a mild, earthy Odor and possesses a slightly bitter and astringent taste	 Fig.root of p.integrifolia
Stem	The stem of *Premna integrifolia Linn.* is erect, woody, and extensively branched. It is greyish-brown in colour and often marked with longitudinal cracks. The surface is rough, particularly in mature branches, due to the presence of lenticels and peeling bark. Young branches are typically quadrangular in shape, while older branches become cylindrical. The texture of the stem is hard and fibrous. It has a slightly aromatic Odor and a bitter taste.	 Fig.stem of p. integrifolia
Leaf	The leaves of *Premna integrifolia Linn.* are simple, exstipulate and arranged oppositely in a decussate manner. They are ovate to oblong in shape with an acute apex and a base that is rounded to slightly cordate.The leaf margin is usually entire but may be slightly crenate in some cases. The venation is reticulate, providing a distinct network pattern. The upper surface of the leaf is green, while the underside is lighter in colour and covered with fine hairs, making it pubescent. When dry, the leaves have a leathery to papery texture. They emit an aromatic odor due to the presence of essential oils and have a slightly bitter taste	 Fig.leaves of p.integrifolia

Flower	The flowers of *Premna integrifolia Linn.* are small, bisexual, and zygomorphic in nature. They are typically arranged in cymose panicles which are mostly terminal in position. The flowers are greenish-white to pale violet in colour, adding a subtle charm to the plant. The calyx is small and bell-shaped, consisting of five lobes. The corolla is bilabiate and five -lobed, upper lip divided into two lobes and the lower lip into three.The flower bears four stamens arranged in a didynamous manner, with two long and two short stamens. The ovary is bicarpellary and four-lobed and the style is gynobasic, arising from the base of the ovary.	 Fig.infloroscence of p.integrifolia
Fruit	The fruit of *Premna integrifolia Linn.* is a drupe, typically ovoid or globose in shape. It is green when unripe and gradually turns blackish-purple upon ripening. The surface of the fruit is smooth, giving it a glossy appearance. Internally, it usually contains four pyrenes, which are hard seed units enclosed within the fleshy part of the drupe.	 Fig.fruit of p.integrifolia

Internal morphology /Microscopic characteristics of Root [9]

The transverse section of the root shows an exfoliating cork composed of 10–15 layers of tangentially elongated, thick-walled cells. The cortex is made up of round to oval parenchymatous cells, some of which contain rhomboid-shaped calcium oxalate crystals. The endodermis consists of 3–4 layers of non-lignified, thick-walled, rounded parenchymatous cells, while the pericycle is represented by a single layer of non-lignified, thin-walled, rounded parenchymatous cells situated just below the endodermis. The phloem is formed of isodiametric, thin-walled parenchymatous cells, a few of which also enclose rhomboid crystals of calcium oxalate. The xylem occupies a wide zone and contains lignified pitted vessels, occurring either singly or in groups of 2–3, scattered throughout the region. The medullary rays are biseriate, lignified, and radially elongated, appearing narrower in the xylem region and broader in the phloem region.

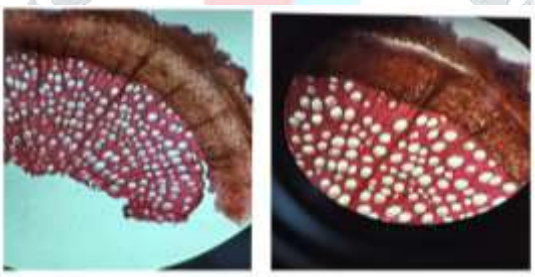

Fig.no. 8 T.S.of *P. integrifolia L.* Root

Powder Microscopy [10]

The root powder of *premna integrifolia Linn.* is dull yellow in appearance and shows fragments of cork cells arranged in 2–3 rows of tangentially elongated, thick-walled cells. The cortex is composed of thin-walled, round to oval parenchymatous cells, along with lignified and pitted xylem vessels measuring 60.25–145.6 µ. It also contains non-lignified sieve tubes and rhomboid-shaped calcium oxalate crystals, which measure 12–24 µ in length and 6–15 µ in width

Fig.no.9 powder microscopy root

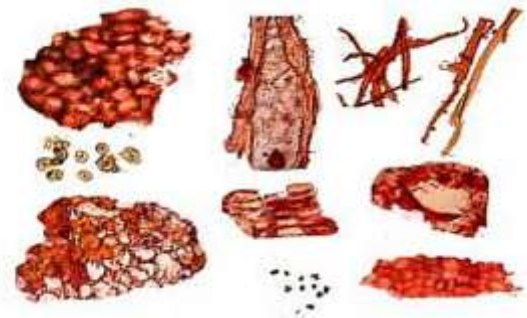

Fig. 10 Powder Microscopy of P. integrifolia L. root cork cells in surface view, tangentially cut medullary ray associated with fibres, rosette crystals of calcium oxalate e. parenchyma with tannin content, starch grains.

Ideal Time for Harvesting of *premna integrifolia Linn.*

A) According to Ayurveda [11]

Table no.3

***Prayojyang* (useful part)**	***Charak***	***Sushruta***	***A.sangraha***	***Raj nighantu***	***Bruhat Nighantu R.***
Moola (Rooot)	*Greeshma*	*Pravruta*	*Greeshma*	*Shishir*	*Shishir and Greeshma*
Twaka (bark)	*Sharad*	*Sharad*	*Sharad*	-	-
Patra(leaves)	*Varsha,vasant*	-	*Varsha,vasant*	*Nidagha*	*Varsha,vasant*
Pushpa(flowers)	*Yatha rutu*	-	*Yatha rutu*	*Vasant*	*Yatha rutu*
Phala(fruits)	*Yatha rutu*	*Grishma*	*Yatha rutu*		*Yatha rutu*

Season: The best time to harvest *Agnimantha* is during the *Sharad Ritu* (autumn season) or *Grishma Ritu* (summer season) when its medicinal properties are at their peak.

Maturity: Fully grown plants (about 2–3 years old) are ideal for harvesting.

B) According to modern

1. Roots – Most commonly used part

Time: Collected during late summer or autumn.

Method: The plant is carefully uprooted, and the thick mature roots are cut while leaving some roots intact to allow regrowth.

Processing: Washed, shade-dried, and cut into smaller pieces before use.

2. Bark

Time: Best harvested in spring when the tree is actively growing.

Method: A small portion of bark is stripped without damaging the tree's health.

Processing: Sun-dried and stored in a cool place.

3. Leaves

Time: Fresh leaves are collected in the morning before sunrise when essential oils are at their peak.

Method: Hand-plucked or cut with sharp tools.

Processing: Used fresh or shade-dried for medicinal formulations.

4. Flowers & Fruits

Flowers: Harvested in early blooming stages (spring/summer).

Fruits: Collected when fully mature (late summer).

Post-Harvest Processing

1. Cleaning: The harvested parts are cleaned with water to remove dirt and impurities.

2. Drying: Shade drying is preferred to preserve active compounds.

3. Storage: Kept in air-tight containers in a dry, cool place to prevent spoilage.

Synonyms [12]

1) *अरणि or अरणी- अरण्यां भव अरणी ।*
It grows usually in the forests

2) *अग्निमन्थः-'अग्निं मथ्नाति मन्थ-विलोडने' । (भा.दी.)*

It produces fire on churning in a hole made in the log.

3) *आरणी- ज्वलनां स्वयं भ्रमणो आवर्ते|(नि.आ.)*

It produces fire on churning in a hole made in a piece of wood.

4) *कणिका- कणति इति । 'कण् शब्दे' |(भा.दी.)*

It produces characteristic sound on breaking is stem.

5) *गणकारिका- गणाः सन्त्यस्याः इति । गणं समूहमित्यर्त्ति इति गणकारी । (नि. आ.)*

It fights/acts against a group of diseases

6) *जया & जयन्ती जयति इति। (भा. दी.)*

Because of its ushna veerya it conquers diseases born out of vitiation of kapha, vata etc.

7) *तर्करी- तर्कम् ऋच्छति इति। (भा. दी.)*

It is frequently discussed/praised by many people because of its good qualities.

8) *नादेयी- नद्यां भवा इति । (भा. दी.)*

It occurs near the rivers or river banks.

9) *वैजयन्तिका- वैजयन्ती पताक इव इति| (नि. आ.)*

It is the flag bearer on behalf of all the herbs.

10) *श्रीपर्ण- श्रीः पर्णेषु अस्य इति । (भा. दी.)*

The leaves are full of wealth & health (Lakshmi).

GANA:

Table no.4

Charaka [13]	*Shothohar, shitaprashamana Anuvasnopaga*
Shushrut[14]	*Virtarvadi, Varunadi, Vatasamshamana*
Vagbhat[15]	*Virtarvadi, Varunadi*
Bhavprakasha[16]	*Guduchyadi varga*
Raj nighantu[17]	*Prabhadradi varga*
Kaiyyadev Nighantu	*Aushadhi varga*
Dhanvantari nighantu	*Guduchyadi varga*

Ayurvedic Properties: *Rasa panchak* [18]

Table no.5

Rasa	*Tikta* (bitter), *Katu* (pungent), *Kashaya* (astringent), *Madhura* (Sweet)
Vipaka	*Katu*
Veerya	*Ushna*
Guna	*Laghu* (lightness), *Rooksha* (dry)
Effect on *Tridosha*	Balances *Vata* and *Kapha*

Part used – Root bark, leaf
Dose - Powder 1-3 g,
decoction 50-100 ml,
leaf juice 10-20 ml in divided dose, per day.

PHYTOCHEMISTRY

A) PHYSICAL [19]

The plant has been reported to have some physical constituents, as shown in the table.

Table no.6

Parameters	Values%
Total ash	8.9
Water soluble ash	0.77
Acid soluble ash	8.2
Alcohol soluble extractives	2.04
Water soluble extractives	13.8

Alkaloids, carbohydrates, amino acids, steroids, flavonoids, glycosides, tannins and phenolic compounds were found in preliminary phytochemical screening as well as fluorescence analysis of stem-bark and stem wood of *P. integrifolia* were also performed. These observations would be helpful in the standardization of the drug in crude form and to distinguish the plant from its related adulterants.

CHEMICAL CONSTITUENTS [20]

Table no.7

PLANT PART	PHYTOCONSTITUENTS	EXTRACTIVE SOLVENT	CATEGORY
Root	Premnine, premnazole clerodendrinA, glycerin quercetin, digoxin,	Crude extract Methanol ethanol aq. enriched fraction methanol	Alkaloid Diterpene Volatile Flavonoid Cardiac glycoside
Root bark	2α19-dihydroxy-primara-7,15-diene	methanol	Diterpenoid
Stem bark	Betulin, Premnadimer Premnosidic acid	Ethyl acetate Methanol methanol	Triterpene Furoturan lignans Iridoid glycosides
Leaves	linoleic acid β-sitosterol luteolin glycerin eugenol biosynthesized AgNps 13 -pentene	Crude extract Ethyl acetate Crude extract Ethanol Organic extract Ethanol methanol	Fatty acid Steroid Flavonoid Volatile Essential oil Nanocrystals Diterpene
Flower buds	Linalool, Z-3-hexanol	hexane	Volatile

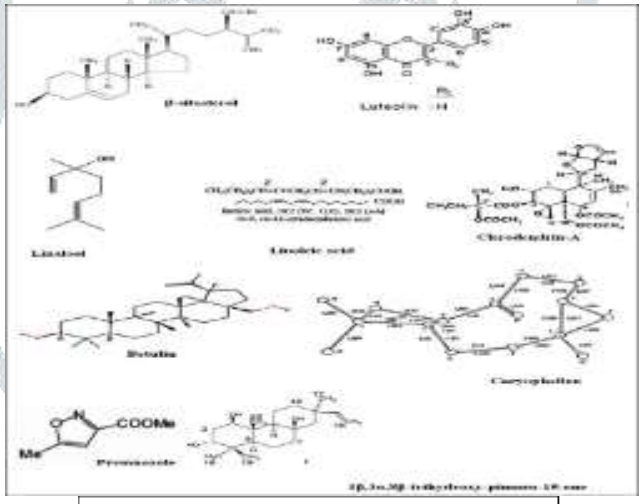

Fig.chemical structures of phytoconstituents

TYPES OF *AGNIMANTHA*-

The classical Varieties

Dhanvantari Nighantu – 1. Agnimantha (Tarkari)
2. Nadeyi
3. Ksudragnimantha (Aranika)

Kaiyyadeva Nighantu – 1. Agnimantha
2. Tarkari

Raja Nighantu 1. Agnimantha – Premna integrifolia
2. Kshudra agnimantha – Clerodendron phlomides

Table no.8

Sr. No.	Species	Common names	Distribution	Features	Medicinal uses	Plant
1	*Premna serratifolia*	*Agnimanth, Arani, Gambhari*	India, Southeast Asia, coastal and tropical regions	1]Small tree or large shrub 2]Leaves: Ovate with serrated margins 3]Flowers: Yellowish-green, in terminal cymes 4]Fruits: Small, black drupes	Used for respiratory issues, digestion, diabetes, and inflammation	 *Fig.no.11 Premna serratifolia*
2	*Premna latifolia*	*Broad-leaf Premna*	India, Nepal, Southeast Asia, tropical and subtropical forests	Broad, heart-shaped leaves Small greenish-yellow flowers	Used in Ayurveda as an anti-inflammatory and tonic herb	 *Fig.no.12 Premna latifolia*
3	*Premna corymbosa*	Coastal Premna	Coastal regions of India, Sri Lanka, Southeast Asia	Adapted to saline and coastal areas Has thick, leathery leaves	Used in folk medicine for treating fevers and wounds	 *Fig.no.13premna corymbosa*
4	*Premna mollissima*	Soft-leaved Premna	India, Nepal, Myanmar	1]Soft, hairy leaves 2]Small greenish flowers in clusters	Used in traditional medicine for respiratory issues	 *Fig.no.14premna mollissima*
5	*Premna tomentosa*	Hairy Premna	India, Southeast Asia	Densely hairy stems and leaves Grows in dry and rocky regions	Used for skin diseases and digestive problems	 *Fig.no.15 premna tomentosa*

6	*Clerodendrum phlomidis*	*Arani, Tikhad*	India, Sri Lanka, Southeast Asia	1]Deciduous shrub or small tree 2]Leaves are opposite, ovate-lanceolate, and rough 3]Flowers are small, white to pale violet, in terminal panicles 4]Fruits are drupe-like and dark purple when ripe	1]Anti-inflammatory, antipyretic, and diuretic properties 2] Used to treat fever, arthritis, and digestive disorders	 *Fig.no.16 Clerodendrum phlomidis*

OCCURRENCE AND DISTRIBUTION

It is growing near western sea coast from Bombay to Molucca, Malaysia, Sri Lanka, Andaman and Nicobar. It is also found in forest of South India and West Bengal (Northern part). Moreover, it is also recorded as occurring in the plains of Maharashtra, Gujarat, North Karnataka, Assam, Khasi hills and Tarai. In Orissa, it is found on land periodically covered by tides in Mahanadi delta.

Common Adulterants and Substitutes

1. *Clerodendrum species*

Clerodendrum phlomidis (commonly mistaken as *Agnimantha*)

2.*Clerodendrum infortunatum*

These species have some similar properties but are not as potent as true *Agnimantha.*

3. *Premna obtusifolia*

Often used as a substitute due to similar morphology, but differs in chemical composition.

4. *Gmelina arborea*

Another plant from the Verbenaceae family, sometimes mixed with *Agnimantha.*

5. *Vitex negundo*

Used as an adulterant due to similar leaves, but it has distinct pharmacological properties.

FORMULATIONS:

Table no.9

***Charak Samhita*:**

Sr.no.	*Vishishta yoga*	*Rogaghnata*	References
1.	*Shonakadi lepa* [21]	*Urustambha*	*Cha. Chi*. 27/57
2.	*Baladi lepa*	*Granthi*	*Cha. Chi*. 21/125
3.	*Agaruwadi taila* [22]	*Jwara, sheetajwara*	*Cha. Chi.* 3/269
4.	*Kansaharitaki leha*	*Raktapitta, amlapitta, amavata, gulma, swasa*	*Cha. Chi.* 12/50
5.	*Brhmana rasayana* [23]	*Rasayana, deergayu, manoabhilasha*	*Cha. Chi.* 1.1/43
6.	*Chavanprasha leha*	*Rasayana, kasa, swasa, kshataksheena*	*Cha. Chi* 1/69
7.	*Tarkaradi lepa*	*Urustambha*	*Cha. Chi*. 27/52
8.	*Dashamoola ghrita* [24]	*Kasa, Hikka, Swasa*	*Cha.Chi*. 17/140
9.	*Dashamoola kwatha*	*Kasa, Swasa*	*Cha. Chi*. 17/105
10.	*Dwipanchamooladi ghrita* [25]	*Kshaya, kasa*	*Cha. Chi*. 18/160
11.	*Dashamoolayavagu*	*Swasa, Hikka*	*Cha.Chi*. 19/103
12.	*Agastya haritaki*	*Vishama jwara, kshaya, kasa*	*Cha. Chi.* 18/62
13.	*Patoladi basti kashaya*	*Udavartha, vibandha*	*Cha. Chi.*2/13
14.	*Agnimanthadi swarasa*	*Medoroga, stoulya*	*Cha. Chi./*21/24

Table no.10

Shusrut Samhita:

Sr.no.	*Vishishta yoga*	*Rogaghnata*	References
1.	*Aushadheeya ayaskriti* [26]	*Sthoulya, mutrakrichra, rajayakshma*	*Su. Chi.* 10/13
2.	*Panchamooladi ghrita* [27]	*Shiroroga, karnaroga*	*Su.Chi.*26/5
3.	*Dashamoola ksheera basti*	*Shoola, pravahika*	*Su. Ut*
4.	*Dwipanchamoola kwatha* [28]	*Shoola, pavahika.*	*Su.Ut.* 40/144
5.	*Bilwadi sura*	*Garbani vyapat*	*Su. Ut*

Table no.11

Ashtang Hridaya

Sr.no.	*Vishishta yoga*	*Rogaghnata*	References
1.	*Agnimanthadi lepa* [29]	*Vatajashopha*	*A.H.Chi*. 17/19
2.	*Agnimantha dhumapan* [30]	*Dushtapeenasa*	*A. H.Chi.* 20/16
3.	*Dashamooladi avaleha*	*Svayathu, jwara, gulma, amavata*	*A. H.Chi.* 17/17
4.	*Kalamushkakadi kshara*	*Ashmari, gulma, agnimandya, arbuda*	*A. H.Chi.* 10/12
5.	*Agasthya haritaki rasayana*	*Rasayana, kasa, swasa, kshaya, prameha,*	*A.H. Chi.*5/81
6.	*Dashamoola haritaki* [31]	*Shotha, amavata, gulmaroga, pandu*	*A.H.Chi.* 19/29
7.	*Gandeerarista* [32]	*Pandu, granthi, arbuda,*	*A.H.Chi.* 18/24

Table no.12

Chakraddtta Chikitsa Sangraha

Sr.No.	*Vishishta yoga*	*Rogaghnata*	References
1.	*Punarnavadi pralepa.*	*Kaphavataja shotha,*	44/9
2.	*Guggulu prayoga*	*Kaphaja vidradhi*	43/11
3.	*Punarnavadya ghritam*	*Shotha*	39/31
4.	*Punarnavadya avaleha*	*Shotha*	39/46

Table no.13

Bharat Bhaishjya Ratnakar

Sr.No.	*Vishishta yoga*	*Rogaghnata*	References
1.	*Abhyamalaki rasayan* [33]	*Rasayan*	220/ part 1st
2.	*Agnimanthyadi kshar tail* [34]	*Udar*	56/2nd part
3.	*Abhyarishta*	*Udar*	72/2nd part
4.	*Amrutarishta*	*Jwar*	72/2nd part
5.	*Tarkarikadi lepa* [35]	*Vriddhi nashak*	1051/2nd part
6.	*Dashmoola kwatha*	*sutikaroga*	4/3rd part
7.	*Dashmoola ksheer yoga*	*Sutika roga*	4/3rd part
8.	*Dwipanchmooladi kwath*	*visphot*	5/3rd part
9.	*Dashmooladichaturdashang kwath*	*jwar*	7/3rd part
10.	*Dashmoolbalarasna* [36]	*Kshya,kasa*	7/3rd part
11.	*Dashmooladi yawagu*	*shwasa*	7/3rd part
12.	*Dashmoolavsechan*	*Vrana*	8/3rd part
13.	*Dashmooladi churna* [37]	*shotha*	26/3rd part
14.	*Dashmool guda*	*Gulma ,arsha*	44/3rd part
15.	*Dashmoola shatpal ghrita*	*jwara*	52/3rd part
16.	*Dwipanchmooladya ghrita*	*Kasa, bala, varna*	67/3rd part
17.	*Dashmoola taila* [38]	*Shiroroga,vata ,gulma*	72/3rd part
18.	*dashmoolasava*	*kshya*	84/3rd part
19.	*Dashmoola basti*	*Krimi,gulma*	120/3rd part
20.	*Panchmooladya avsechan* [39]	*abhishyanda*	239/3rd part
21.	*Punarnavadi kwatha*	*Vidradhi ,jwara*	282/3rd part

Table no.14

Bhaishjya Ratnawali

Sr.No.	*Vishishta yog*	*rogaghnata*	References (page no.)
1.	*Dashmoolguda* [40]	*gulma*	251
2.	*Dashmoolashatpal ghrita*	*kasa*	191
3.	*Panchmooli kwatha* [41]	*Vataj jwara*	77
4.	*Panchmoolibaladi shruta sheeta kwatha*	*Tridoshaja atisara,kasa*	223
5.	*Panchmulyadi siddha dugdham* [42]	*Manovikar,vata*	26
6.	*Panchmoolyaditakram*	*vatatisar*	221

7.	*Agastyaharitaki rasayan* [43]	*Rasayan,aruchi*	15
8.	*Dashmoola haritaki*	*Vata,arsha,ajirna*	803

Table no.15

Yog Ratnakar

Sr.No.	*Vishishta yoga*	*rogaghnata*	References (page no.)
1.	*Narayan taila* [44]	*Ekanga vata,hanustambha,vata*	533
2.	*Dashmooladi taila*	*Bala,varna,vata*	535
3.	*Mahalakshmi Narayan taila* [45]	*Vata nashak*	536
4.	*Mahabala tailam*	*Ksheena veerya,vata*	540
5.	*Rasnaputik tailam* [46]	*Ardit,padharsha*	541

DISCUSSION:

Ayurvedic pharmacodynamics [47]

- By the virtue of bitter, pungent and astringent tastes present in *agnimantha* the *kapha dosha* gets alleviated upon its administration.
- The hot *veerya* of *agnimantha* appeases the *vata* dosha.
- In diseases influenced by the aggravation of *vata* and *vatakapha,* the utility of *agnimantha* is beneficial.
- In *Charaka Samhita, agnimantha* gets mentioned under the *shotha hara* [inflammation reducing agents] *ganas.*
- Thus, in inflammatory conditions caused by *kapha* and that of *vata* the decoction prepared of *agnimantha* bark helps control the etiopathogenesis.
- Likewise, *agnimantha* is beneficial in *vataja* fever, *vataja* cough,*vataja* anemia and in intrinsic *vataja* diseases.
- By the virtue of its hot *virya* [potency] the *agnimantha* stimulates the digestive enzymes *[agni deepana*].

PHARMACOLOGICAL ACTIVITIES:[48]

Antimicrobial: Extractions from the leaves and bark of the plant have antimicrobial properties.

Anti-inflammatory: Extracts of the plant have anti-inflammatory properties.

Antioxidant: The plant contains compounds with strong antioxidant activity.

Hepatoprotective: The plant has been shown to protect the liver.

Antidiabetic: Some studies suggest that the plant's extracts can help manage diabetes.

Anti-ulcer: Extracts of the plant have been shown to have anti-ulcer properties.

Wound healing: The plant is used in traditional medicine for wound healing.

Properties, Actions and Indications

1) *अग्निमन्थः श्वयथुनुद्वीर्योष्णः कफवातहत्। पाण्डुनुत्कटुकस्तिक्तस्तुवरो मधुरोऽग्निदः ।।*[49]

(भा.प्र. गुडूच्यादि वर्ग-२३)

2) *तर्करी कटुका तिक्ता तथोष्णाऽनिलपाण्डुजित् । शोफ श्लेष्माग्निमान्द्यामविबन्धांश्च विनाशयेत् ।*[50]

(।ध.नि. गुडूच्यादि वर्ग ११०)

3) *तर्करी कटुका तिक्ता तुवरा मधुराग्निदा । वीर्योष्ण हरते वातकफ श्वयथु पाण्डुताः।*

अग्निमन्थो गुणैस्तद्वाद्विशेषाद्वातशोफहा ।।[51] *(कै.नि. ओषधि वर्ग २५-२८)*

4) *तर्करी कटुरूष्ण च तिक्ताऽनिलकफापहा । शोफश्लेष्माग्निमान्द्याशोंऽ विड्बन्धाध्मान नाशनी ।।*

अग्निमन्थद्वयं चैव तुल्य वीर्यरसादिषु । तत्प्रयोगानुसारेण योजयेत् स्वमनीषया।।[52] *(रा.नि. प्रभाद्रादिवर्ग२३-२५)*

CONCLUSION:

Premna integrifolia L., known in Ayurveda as *Bruhat Agnimantha*, is a time-honored medicinal plant that continues to hold relevance in both traditional and modern healing systems. Its long-standing use in treating ailments such as fever, inflammation, digestive troubles, and respiratory conditions reflects the deep trust placed in its therapeutic value. What sets this plant apart is its impressive blend of natural compounds-flavonoids, alkaloids, tannins, saponins, and essential oils-that work together to deliver a wide range of health benefits. These include fighting infections, calming inflammation, protecting vital organs like the liver and heart, and even supporting brain function. Its inclusion in classical Ayurvedic formulations like Dashamoola further emphasizes its central role in holistic medicine. Microscopic analysis has revealed key features such as calcium oxalate crystals and lignified vessels, which support its pharmacological potential. These findings provide a strong foundation for future exploration.

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