Review Article

REVIEW ARTICLE ON GAMBHARI (GMELINA ARBOREA LINN)

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Received 30-09-2014; Revised 25-10-2014; Accepted 21-11-2014

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ABSTRACT

Gmelina arborea an important medicinal plant is one of the most widely cultivated species of the family Verbenaceae. It is commonly known as “Gamhar” is a beautiful fast growing tree throughout in India and one of the herbs mentioned in all ancient scriptures of Ayurveda. It is known to have been used in traditional Indian medicine having important source of chemicals of immense medicinal and pharmaceutical importance. It is highly valued from time immemorial because of its vast medicinal properties. Gambhari, an essential component of Dashamula dravya is termed to be Rasayana dravya, medhya activity has been related to its fruits, which are edible in nature. It is extensively used traditionally as anthelmintic, antimicrobial, antidiabetic, diuretic, hepatoprotective and antiepileptic agent. The present article provides all necessary information regarding its classical literature.

Keywords: Dashamula, Gambhari, Gmelina arborea, Verbenaceae.

INTRODUCTION

In the last few decades there has been an exponential growth in the field of herbal medicine. It is getting popularized in developing and developed countries owing to its natural origin and lesser side effects. Nature has provided a complete storehouse of remedies to cure all ailments of mankind. About 80% of the world population depending on herbal based alternative system of medicine. Herbal drugs have played a vital role in curing diseases throughout history of mankind. Despite the major advances in the modern medicine, the development of new drugs from natural products is still considered important. An estimated 70,000 plants are used medicinally. Ayurveda utilizes about 2000 plants to cure different ailments. There are very few medicinal herbs of commercial importance, which are not cultivated in our country. Approximately 1250 Indian medicinal plants are used in formulating therapeutic preparations, according to Ayurveda and other traditional systems of medicine. The evaluation of various plant products according to their traditional uses and medicinal value based on their therapeutic efficacy leads to the discovery of newer and recent drugs for treating various ailments. This fact forms the basis for the development of new drugs from various plant sources. One of such plants of medicinal value is Gmelina arborea, belonging to the family Verbenaceae, commonly known as ‘Gamhar’. Gmelina is one of the important genera of the family, consisting of about 33 species. It is a beautiful fast growing deciduous tree, which is a vital ingredient of the “dasamula”3.

It is a popular commercial timber grows naturally in the warm temperate regions of Mediterranean and South Asia. The plant is commonly found in abundance on the hills and in the Andaman Islands of India.

CLASSICAL REVIEW OF GAMBHARI

Historical aspect of the drug

In ancient Indian literature like Vedas the synonyms of Gambhari like Rohini, Kashmariya, Sriparni etc have been described. For the first time the name Rohini was mentioned in Atharva veda, where it is considered as Asthisansthapaka and Keetanunashaka. The name kashmariya is given in Shatapatha Bramhan, where it is explained as disinfectant. But the properties of which do not correlate with the Gambhari. There is no reference that Rohini and Gambhari are same.

Samhita Kala:

The exhaustive information of Gambhari is available in this period.

Charaka samhita: Reference of Gambhari is found at 57 different places. In Charaka samhita Gambhari is explained by the name Kashmari and mentioned its synonyms as Kashmariya and sriparni, other synonyms are Madhuparni, Bhadraparni, Krishna Madhurasa and Rohini. As Madhuparni and Kashmari are included in Madhura skanda both are seems to be different drug. According to Chakrapani madhuparni is madhuyasti. Charaka included Gambhari in virechanopaga, dahaprasamana, shwayathuhara, madhura skanda, vataghna gana.
formulations of this drug is mentioned in the management of 20 Rogas.

**Sushruta samhita:** Compared to charaka samhita no much information available in sushruta samhita. But mentioned different names – Kasmarya, Kasmaryya, Sriparni etc. Sushruta has explained this drug in 37 different contexts, particularly in Panchamoola and sarivadi gana. It is also mentioned in Shalya karma.

**Table 1: Gana and Varga According to Different Authors**

<table>
<thead>
<tr>
<th>Samhita/Nighantu</th>
<th>Gana/ Varga</th>
<th>Samhita/Nighantu</th>
<th>Gana/ Varga</th>
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<tbody>
<tr>
<td>Charaka samhita</td>
<td>shothahara, Dhaprashamanana, Virechnopga, Phalavarga, Madhura skanda</td>
<td>Sushruta samhita</td>
<td>Sarivadi, Dashamula, Phalavarga, Madhura gana, Brihat panchamula,</td>
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<tr>
<td>Abhidhana ratnamala</td>
<td>Chaturtha shkanda/Tikta dravya skanda</td>
<td>Mahaooshadhi nighantu</td>
<td>Bilvadi Varga</td>
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<tr>
<td>Ashtanga hridaya</td>
<td>Sarivadi, Brihat panchamula, Madhura varga</td>
<td>Dravyaguna sangraha</td>
<td>Phala varga</td>
</tr>
<tr>
<td>Bhavaprakashida nighantu</td>
<td>Guduchyadi Varga</td>
<td>Gunaratnamala</td>
<td>Amradi varga</td>
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<tr>
<td>Kayadeva nighantu</td>
<td>Oushadhi varga</td>
<td>Chakradatta</td>
<td>Brihat panchamula, Dashamula</td>
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<td>Shaligramia nighantu</td>
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<td>Madanapala nighantu</td>
<td>Abhayadi Varga</td>
<td>Dravyaguna sangraha</td>
<td>Phala varga</td>
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</table>

**PARYAYA AND ITS MEANING**

- **Gambhari:** It possesses plenty of water. Gambhari is a beautiful tree
- **Kashmari:** It is famous because of its good qualities. Like kumbhi, grows fastly
- **Krishnavrinti:** Blackish petiole
- **Peetarohini:** It bears yellow flowers. Yellowish bark
- **Bhadrarni:** Leaves are beautiful
- **Shreeparni:** It leaves are very beautiful
- **Mahakumbhi:** Inflorescence is long
- **Mahakusumak:** Inflorescence is long
- **Vatahruta:** It is a good remedy for vatika disorders
- **Sarvatobhadra:** Each part of this tree has medicinal values. Useful in many ways
- **Suphala:** Fruits are wholesome
- **Sthulatwacha:** Bark is thick
- **Heera:** Used as rasayana
- **Madhuparni:** Its leaves are as sweet as honey. Its leaves are glabrous (shining like honey)

**Vividha basha nama (Vernacular names)**

1. Assam: Gomari
2. Bengal: Gamari, Gumar, Gumbar
3. Bhi: Chimman, Sag
4. Bombay: Kashmari, Shewun
5. Burma: Kynboc, Kywonpho, Yamanai, Yemene
6. Cachar: Gumai
7. Canarese: Bachanje, Gupsi, Kashmiri, Kule, Kumbudi, Kumule, Shivani, Triparni
8. **Central Provinces:** Gumghar, Shiwun
9. English: Candhar Tree, Cashmere Tree, Coomb Teak, White Teak – Garo Bolkobak
10. Gond: Kurse
11. Gujarati: Savan, Shivan, Sivan
12. Hasada: Kasom bardaru
13. Hazara: Sewan
15. Kadir: Kumula
16. Kolami: Gumher, Kasamar
17. Konkan: Nuvon, Sivony
18. Koya: Gumudu – Kumanon Khamara, Kumhar
19. Kurku: Kassamar
20. Lambadi: Gupsiro
21. Lepeha: Numbon
22. Magahi: Ramani
23. Malayalam: Naguri: Kasmardar
25. Punjab: Gumhar, Kumhar
26. Rajputana: Sewan
28. Santali: Kasmar
29. **Sinhalese:** Ademmata
30. Tamil: Arisa, kalarbadi, Kattanam, kumil, Kumbal, Perungumil, Pulingumil, Umitekku
31. Telugu: Adavigum mudu, Chalagummadu, Gummadu, Gummadi, Gummudu, Gummuteku, Gumteku, kasmaryamu, Pedagumdu, Pedagummedteku, Teggummu
32. Uriya: Bhodroporni, Gambhari, kasmori
Table 2: Gunas (Properties) of Fruit According to Different Authors

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Table 3: Gunas (Properties) of Different Parts of Plant According to Different Authors

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<td>Pushpa</td>
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<td>Guru</td>
<td>Ushna</td>
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<td>Tridosha</td>
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</tbody>
</table>

KARMA (ACTIONS) ACCORDING TO DIFFERENT AUTHORS

Sheetala, Snehana, Medhya, Keshya, vedanasthapana, Trishnasamak, Deepana, Anulomana, Raktapittashamak, Raktarodhaka, Shothahara, Sandhaneeeya, balya, Mootrajana, Garbhasthapana, Stanyajanana, Virshya, Jwarghna, Dahaprasamana, Katuapushitaka, Brumhana, Rasayana, Vrishaghna.

PRAYOGA (THERAPEUTIC USES) ACCORDING TO DIFFERENT AUTHORS


Table 4: Prayoja Anga (Useful Part) According to Different Authors

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</table>
**ACTIONS AND USES**

- The root is acrid, bitter, sweet, stomachic, tonic, laxative, galactagogue and anthelmintic. It is useful in hallucination, fever, dyspepsia, hyperdipsia, haemorrhoids, gastralgia, anasarca and burning sensation.
- Bark is bitter, tonic and stomachic and is useful in fever and dyspepsia.
- Leaf paste is good for cephalgia and leaf juice is useful in gonorrhoea, catarrh of bladder and is a good wash for foul ulcers.
- The flowers are sweet, refrigerant, bitter, astringent and acrid and are used in treating leprosy and skin diseases.
- Fruits are acrid, sour, sweet, bitter, refrigerant, diruretic, astringent, aphrodisiac, trichogenous, alternant and tonic. They are used for promoting the growth of hair and for anaemia, leprosy, ulcers, constipation, strangury, leucorrhoea, intrinsic haemorrhage, fever and bilious affections.

**ACTION AND USES IN UNANI**

In Unani system of medicine this vanaspathi is used in pittaraktha vikara and kshaya roga. It is viryavardaka, chopra, Gambari is katu rasa, poustika, Agni vardhaka, ajeerna, The branches of Gambari are used in making artificial strengthening and useful in kapha, sandhivata, jwara & kshatha.

Its leaves are used as antihelmentic. Its roots are appetizer, strengthening and useful in kapha, sandhivata, jwara & kshatha. The branches of Gambari are used in making artificial body parts.

According to Brihatraja it is used as Vishaghna in snake and scorpion bite. According to Roberts the decoction of Root & bark of Gambari is beneficial in snake bite According to kes and maskar each and every useful part of Gambari is beneficial in snake and scorpion bite. According to kernel chopra, Gambari is katu rasa, poustika, Agni vardhaka, virechaka and is beneficial in snake bite and scorpion bite. According to Brihatraja it is used as Vishaghna in snake and scorpion bite.

**Mode of use in different conditions:**

1. **Mooottrakricchra** : In burning micturition the tender leaves juice is used.
2. **Krimi Roga** : The root decoction is used in intestinal worms.
3. **Kasa** : Gambari and vasa patra swaras is beneficial in expectoration and cough.
4. **Sheetapitta** : Dry fruit cooked with milk and used.
5. **Kshatha** : The kalka of tender leaves is used in Nakha-kshatha.
6. **Pitta jwara** : Phala kwatha is beneficial
7. **Dugda vriddi** : The Roots of Gambhari is mixed with yastimadhu, sugar and madhu and licked.
8. **Amlapitta** : Patra choorna of Gambhari, Roots of Apamarga is mixed with cow milk and given for 14 days cures Amlapitta.
9. **Raktha pitta** : By eating ripe fruit of Gambhari 1 or 2 every day cures Rakthapitta.

**FORMULATIONS AND PREPARATIONS**

- Dashamoolarishta
- Dashamoolaharitaki
- Dashamoola ghrita
- Dashamoola shatapalaka ghrita
- Arvindasava
- Drakshadi kvatha churna
- Shriparnyadi kvatha
- Shriparni taila
- Brihat panchamoolyadi kvatha
- Kashmarya kvatha
- Kashmaryadi sheeta kashya
- Mooshakadaya taila
- Vayuchchhayya surendra taila
- Mritisanjivani sura
- Dashamoola kvatha churna
- Indukanta ghrita
- Dhanvantara ghrita

**CONCLUSION**

In a nutshell, the present review is indicative of multiple uses of Gambhari in clinical conditions, however the exact mechanism of drug action and possible toxicity effects needs to be evaluated in further animal and clinical studies.

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Source of support: Nil, Conflict of interest: None Declared