A REVIEW ON CLASSICAL THERAPEUTIC USES OF BILVA (*AEGLE MARMELOS CORR.*)

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ABSTRACT

*Aegle marmelos* Corr. (Bael), is a popular plant and cosmopolitan in distribution. *A. marmelos* is rich in medicinal properties. Since Vedic kala, Bilva was found in many single and compound formulations in Ayurvedic literatures. Every part of plant such as root, unripe fruit, stem, bark, leaves, flowers have therapeutic values. It is one of the important ingredients of Dashamoola. In this review, critical analysis of these single and compound formulations was carried out and details summarized here.


INTRODUCTION

Bilva (*Aegle marmelos* Corr.) commonly known as bael tree belonging to Rutaceae family. The tree grows wild in dry forests on hills and plains of central and southern India, Burma, Pakistan and Bangladesh, also in mixed deciduous and dry dipterocarp forests. Bael is moderate sized tree around 6.0-7.5 meters high. It has strong, woody fairly large and often curved root and cream-yellow or yellowish –brown, leathery and slightly aromatic bark. Its branches armed with straight, sharp, axillary, 2.5 cm long spines. *Bilva* has trifoliate, occasionally five-foliolate leaves, greenish-white flowers and globose, grey or yellowish fruit containing sweet, thick, and orange-colored pulp.

The ripe fruit is used for digestive and stomachic complications. Leaves, fruits, stem and roots of *A. marmelos* have been used in ethno-medicine for several
medicinal properties such as astringent, antidiarrhoeal, antidiysenteric, demulcent, antipyretic, antiscourbutic, haemostatic, aphrodisiac and as an antidote to snake venom. Hypoglycaemic, spasmodenic, antiviral, cardiac stimulant, antiemetic, anthelmintic activities were found in Bilva root. Skimmianine showed sedative, hypnotic, analgesic, anticonvulsive, antipyretic activities in various experimental animals. Bilva is one among the most sacred tree of Hindus called as Shivdram. Leaves are offered in prayers to Lord Shiva.

*Bilva* holds an important place in *Ayurveda* for its multi therapeutic uses and religious belief. Every part of plant such as root, unripe fruit, bark, leaves, flowers etc. have therapeutic values and is important ingredient of several *Ayurvedic* formulations. The present review deals with *Ayurvedic* single and compound formulations of different parts of *Bilva*.

**MATERIALS AND METHODS**

*Brihattrayi*, *Laghutrayi* and 15 other chikitsagranthas were referred to compile single and compound formulations. *Rasapanchak* and indications were poised form 29 different *Nighantus*.

**Observations and results:**

**Some compound formulations:**

1. **Root (Moola):** Brahmyarasayan, Chyavanprasha, Dashamoolakwatha, Dashamoolarishta, Anutaila, Raj tail, Narayan tail, Bahushalaguda, Chitrak haritaki, Mritasanjivinisura, Arshakutharrasa, Manasamitravatak, Dantyarishta, Mahapanchagavyaghrita, Kasturibhairavrasa, Arshakutharrasa

2. **Unripe fruit (Apakvaphala):** Brihatgangadharchurna, Laghugangadharchurna, Balabilvaditaila, Pushyanugachurna, Changerighrita, Bhunimbadikwatha, Dhanyapanchakkwatha, Kutajavaleha

3. **Leaves (patra):** Panchapallava, Ramabana rasa, Ashtapatrataila

**Actions and single formulation:**

1. **Root (Moola):**

   - The roots are sweet, astringent, bitter. It has *Laghu, Ushna guna, Tridosha* properties and useful in vomiting, dysurea, asthma, cough, hiccough, tuberculosis, fever, diarrhoea, stomach ache.

   - Charak mentioned *Bilva* root in *Arshoghna, Asthapanopaga, Anuvasanopaga* and *Shothaharadashemani*. *Sushruta* and *Vagbhata* comprised in *Brihatpanchmoolagana*.

   - Decoction of *Brihat Panchmula* mixed with honey alleviates obesity.

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The patient should be well massaged and then dipped into the warm decoction of *Bilva* or buttermilk or sour curd or gruel or cow’s urine. 7

*Bilva* root were recommended as diet in asthma and hiccough 8.

Roots of *Punarnavadvaya* and *Bilva* relieved fever with oedema 9.

Roots of *Bilva*, *Eranda*, *Chitrak* with *Shunthi*, *Hingu*, *Saidhav* relieves any type of stomach ache 10.

Root crushed and applied with gruel on umbilical region relieved dysuria 11.

Root decoction after removing outer layer should be taken with milk promotes longevity. 12.

Only *Bilva* powder with honey and ghee promote intellectual power, longevity and health also. 13.

2. Unripe fruit (*Apakvaphala*):

Unripe fruits are bitter, astringent, and acrid and it has *Snighdha-Tikshna-Laghu guna*, *Ushna veerya*, *Vatakaphagha*, *Sangrahi*, *Deepana*, *Pachana*, *Amanashana*, *Ruchya* and *Hridya* 14 properties.

*Sushruta* and *Vagbhata* mentioned *Bilva* in *Ambashthadi* which cure chronic diarrhoea, heal fractures, good for *Pitta* and healers of ulcers.

Intake of *Bilva* with jaggery checks diarrhoea with blood, relieves pain due to *Ama* and constipation and alleviates disorders of bowels 15.

Tender fruits of *Bilva*, jaggery, oil, *Pippali*and *Shunthi* – all these together should be taken in condition of *Vata*, pain and tenesmus 16.

Paste of tender fruit of *Bilva* mixed with *Shunthi* powder and jaggery alleviates severe *Grahaniroga* if the patient is kept on the diet of butter milk. 17.

One who eats tender fruits of *Bilva* regularly becomes able to control bleeding piles. 18

3. Leaves (*Patra*):

Leaves are bitter, sweet and it has *Ushnaguna*, *Vatahara*, *Kaphapittahara* 19, *Amanashana*, *Grahi*, *Rochana* 20, *Hridya* 21, *Shoolahara*, *Pramehaghna*, *Shothahara* 22 properties.

Juice of *Bilva* leaves mixed with black pepper is useful in oedema caused by 3 *Doshas*, constipation, piles and jaundice 23.
Intake of Bilva leaves mixed with Shunthi, Marich and Pippali alleviates jaundice\textsuperscript{24}.

Juice of Bilva leaves eradicates foul odour of the body.\textsuperscript{25}

Juice of Bilva leaves is strained and added with ghee, rock salt and Pippali then it is rubbed with a cow’s dung fire and dissolved in milk. Filling eyes with this removes inflammation and pain and it is useful in conjunctivitis, Glaucoma and congestion.\textsuperscript{26}

Taking Bilva Leaves as diet subsides Vatadosha\textsuperscript{27} and useful in diarrhoea\textsuperscript{28}.

It is advised to take bath with Bilva leaves for pregnant women\textsuperscript{29}.

Dhupa of Bilva leaves with Shirisha leaves, Indrayava, Masha etc. helps to stop nighttime crying of child.\textsuperscript{30}

Decoction of Panchapallava (Leaves of Amra, Jambu, Bilva, Kapittha, Bijapoorak) is administered for gargling in stomatitis.\textsuperscript{31}

Bilvapatrasadhita jalais used in bath in bridal ritual in vedickala.\textsuperscript{32}

4. Fruit (Phala):

- The ripe fruits are bitter, astringent, acrid and it has Guru, Ruksha guna, Tridoshakara, Durjara, Pootimarutkar, Vidahi, Agnisadakara, Vrishya, Grahi, Shukrala, Sugandhi, Adhmanakara\textsuperscript{33}, Dahakara, Vishtambhi\textsuperscript{34} properties.

- Bilva fruit is considered as vegetable source of unctuous substance for modulus, rough stool, unfavorable Vayu, mild digestion, coarseness.\textsuperscript{35}

5. Flower (Pushpa):

- Flowers are useful in diarrhoea, excessive thirst, and vomiting.\textsuperscript{36}

- Bilva flower should be taken as diet in eruptive Boils\textsuperscript{37}.

- Flowers of Bilva should be taken internally or applied locally in skin diseases.\textsuperscript{38}

6. Stem (Kashtha):

- Stem is useful in coughing and it has Amanashana, Hridya, Ruchya, Deepana\textsuperscript{39} properties.

- Sutikagara (Delivery room) and a bed are made by Bilva stem is good for woman and child\textsuperscript{40}.

- Pieces of the stems of the major Pancha-moola measuring eighteen fingers in length should be covered (extending only to three-fourths of the whole) with a piece of linen and then soaked in oil. The stick so formed, should then be lighted and the oil pouring
in drops there from should be used lukewarm (as an ear-drop). It instantaneously removes the pain, and is known as the Dipika-Taila\textsuperscript{41}.

- *Bilva* stem has been used as toothbrush for bringing significant wealth\textsuperscript{42}.
- Vessel used in *Panchakarma* should be made of Bilva stem to nullified *Patradosha*\textsuperscript{43}

7. **Stem bark (Twak):**
   - Decoction of Stem bark of *Bilva* with *Putikaranj, Shami, Udumbar* etc. is made for bathing child with it. This is said to promote longevity\textsuperscript{44}.
   - Stem bark of *Bilva* with honey checks vomiting from *Tridosha*\textsuperscript{45}

8. **Tree (Vriksha):**
   - In condition of *Vata* causing pain in sides, stiffness and cardiac distress, oil mixed with alkali of *Bilva* should be given.\textsuperscript{46}

9. **Spine (Kantak):**
   - It is believed that *Bilva* spine should be strung together in the shape of a garland and tied to cure *Skandhagraha*\textsuperscript{47}.

10. **Epiphyte plant on Bilva (Bilvothabandak):**
    - Taking this with ghee relives *Vishamjwara*\textsuperscript{48}.
    - Roots of Epiphyte plant on *Bilva* with *Shami, Soma, Arjun* wears as ornament in *Skandhagraha*\textsuperscript{49}.

Celestial uses:

- The powder of *Bilvaroot* taken in *Pushyanakshtra* should be blessed with a thousand times by reciting the *Shrisuktam* and then should be mixed with gold, honey and ghee. Taking every morning it brings wealth and health.\textsuperscript{50}
- It is told to wear ‘*Bailvamani*’ (Fruit) as ornament for *Vishtambhajambhana, Dusvapnanashana, Rakshogha, Rasayana, Prajasthapana, Vishaghna and Shamaka* in *ShankhyanaAranyaka*\textsuperscript{51}
- The *Nakshtra shanti pooja* is performed with the help of *Bilva* stem, specially *Dhanishtha, Shatabhisha, Purva Bhadrapada, Uttara Bhādrapadā, Revati Nakshtras*\textsuperscript{52}.
- It is told to wear *Bilva-danda in an UpanayanSamskara*.
- Its flower is useful in *Nakshtra puja*\textsuperscript{53}
- *Bilva* flower is considered in one of the *Ashtapushpa* which liked by Lord *Shiva*.\textsuperscript{54}
- It is auspicious to grow for one who born in *Chitrakshtra*\textsuperscript{55}.
- To see and touch of *Bilva* said to fortunate for everyone\textsuperscript{56}.

**Contraindications:**
- Root is contraindicated in *Rajyakshma*\textsuperscript{57} (Tuberculosis), consumption with *Parada*\textsuperscript{58} (Mercury) and with *Lokanatha Rasa*\textsuperscript{59}.
- Ripe fruit is contraindicated in *Samgrahani*\textsuperscript{60} (Irritable bowel disease), *Arsha*\textsuperscript{61} (Piles).

Table 1, 2 and 3 are showing total number of *Bilva* formulations according to part used in *Bruhattrayi* and other *chikitsagrantha*.

**Table 1**

<table>
<thead>
<tr>
<th>Part used</th>
<th>Charak samhita</th>
<th>Susruta samhita</th>
<th>Astanga samgraha</th>
<th>Astanga hridaya</th>
<th>Sharangdhar samhita</th>
<th>Bhavprakasha samhita</th>
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<td>70</td>
<td>171</td>
<td>117</td>
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<td>Unripe fruit</td>
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<td>Stem bark</td>
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<th>Chakradutta</th>
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### Table-3

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<th>Vangasen samhita</th>
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<th>Nighant ratnakar</th>
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<td><strong>332</strong></td>
<td><strong>320</strong></td>
<td><strong>6</strong></td>
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### SUMMARY AND CONCLUSION

The present review is an approach to compile information regarding single and compound formulation of *Bilva* from different *Ayurvedicchikitsa-grantha*. Every part of *Bilva* shows therapeutic uses as well as celestial uses; but root and unripe fruit were more acceptable part used in formulations by every sages of *Ayurveda*. Maximum single and compound formulations of *Bilva* root and unripe fruit were found in *Vangasenasamhita i.e.238* and *112* respectively. Root along with a part of *Dashamoola* prescribed in many conditions like asthma, cough, oedema, indigestion, sciatica, piles, psychosomatic disorders etc.; while unripe fruit is mostly preferred in gastrointestinal diseases like diarrhoea, dysentery, Irritable bowel syndrome etc. Hence, it can be said that *Bilva (Aegle marmelos)* is useful to cure various diseases safely.

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