



REVIEW OF "BILVA"- A MARVELOUS MEDICINE

Dr. Neha Chalmela

PG Scholar, PG Dept. Of Dravyaguan, Govt. Dhanwantari Ayurveda College Ujjain (MP)

Dr. Shiromani Mishra*

Guide & Associate Professor, PG Dept. Of Dravyaguan, Govt. Dhanwantari Ayurveda College Ujjain (MP) *Corresponding Author

KEYWORDS :

INTRODUCTION –

In this modern era of globalization people are very busy in their own work and focuses only on his career as a result they do not care about their health to save time they eat instant, packaged food or unhealthy food resulting many peoples are suffering from so many digestive problems like loss of appetite, weak digestion constipation, diarrhea, piles etc.

Ayurveda, traditional system of Indian medicine is very rich about herbal medicine, *Bilva* is very useful & common herbal medicine. The word *Bilva* is derived from 'bil' to split. Ya-ska derived this word from bhr. 'to support' or 'to nourish', or from bhid 'to split' *Bilva* consists of dried stem bark of *Aegle marmelos* Corr. (Fam. Rutaceae), an armed, medium sized tree occurring in the plains and upto 1000 m in the hills as well as cultivated throughout the country, particularly in sacred groves. *Bilva* has been conserved since ages.² More than 15 synonyms of *Bilva* are depicted in Ayurvedic texts, like *Shandilya*, *Shailush*, *Shreephal*, *Maloor*, *Gandhgarbh*, *Kantaki*, *Sadaphala*, *Mahakapitha*, *Granthil* etc.³ *Bilva* (*Aegle*

marmelos Corr.) belongs to Plantae kingdom, Geraniales order and Rutaceae family⁴. Vernacular names of *Bilva* are *Bela* or *Bilva* in Bangala, *Bael* or *Baela* in Marathi, *Vilvam* in Tamil, *Bill* or *Billum* in Gujarati, *Bela* in Oriya, *Maredu* in Telugu, *Belin* Urdu and Bengal quince in English⁵.

Its tree found throughout India its forest found in south India, Bihar and Bengal it has religious significance because of this it is generally found near temples⁶. *Bilva* is *Kashaya*, *Tikta Rasa*, *Laghu*, *RukshaGuna* and *KatuVipaka*, *UshanaVirya* drug and has *Kapha-VataShamak* property⁷.

LITERATURE REVIEW –

There is an extent description of *Bilva* in our classical text and *Nighantus* mainly described the properties of various parts of *Bilva*. *Acharya Charaka* mentioned *Bilva* in *Shothahar*, *Arshoghna*, *Aasthapanopaga* and *Anuvasnopaga Mahakashaya*⁸. In *Sushrut Samhita* it is mentioned in *Vrhat Panchmoola*, *Varunadi Gana* and *Ambasthadi gana*⁹.

USES OF DIFFERENT PARTS OF *BILVA* IN NIGHANTUS

	<i>Bhavaprakash Nighantu</i> ¹⁰	<i>Shaligram Nighantu</i> ¹¹	<i>Kaiyadeva Nighantu</i> ¹²	<i>Dhanwantari Nighantu</i> ¹³
<i>Bilva Patra</i> (Leaves)	<i>Vatahar</i> , <i>shothahar</i> , <i>Jwarahar</i> , <i>sleshmanisarak</i> , <i>grahi aamshulaghan</i>	<i>Kapha</i> , <i>vata aam</i> and <i>shoolnashak grahi</i> and <i>Rochak</i>	<i>Vatahar</i> and <i>Sangrahi</i>	----
<i>Bilva Pushpa</i> (Flowers)	Beneficial in <i>Atisar</i> (diarrhea) <i>Trusha</i> (Thirst), <i>vaman</i> (Vomiting)	Beneficial in <i>Atisar</i> (diarrhea) <i>Trusha</i> (Thirst) and <i>Vaman</i> (Vomiting)	Beneficial in <i>Atisar</i> (Diarrhoea) <i>Trusha</i> (Thirst) and <i>Vaman</i> (Vomiting)	----
<i>Bilva Moola</i>	<i>Vatanadi Sansthan</i> , <i>Shamak</i> , <i>Madhur</i> , <i>Chharidighan</i> , <i>Vatahara</i>	----	<i>Madhur</i> , <i>Laghu</i> , <i>Trido shochhar</i> cure vomiting, <i>dyso-urea</i> (<i>Mutrakrichha</i>) and <i>Shoola</i>	<i>Tridoshanasak chhardinasak madhur</i> in <i>Rasa</i> and <i>Laghu</i> in <i>Guna</i>
<i>Bilva Taila</i>	----	<i>Ushna</i> and <i>Vata vinashak</i>	<i>Ushna</i> and <i>Uttam vatahar</i>	----
<i>Bilva Phala</i>	Unripe fruit - <i>Katu</i> , <i>Tikta</i> fruit, <i>Kashaya snigdha</i> , <i>Ushna</i> , <i>Deepan</i> , <i>Grahi</i> , <i>Vatakapha nashak</i> , Protect to intestine Ripe fruit - <i>Madhur sugandhi guru</i> (Heavy), <i>vidahi vishtambhi</i> , <i>durjar doshkar</i> , <i>Amulomic durgandhayukta</i>	----	Unripe fruit - <i>Katu</i> , <i>Kashaya</i> , <i>Tikta Rasa</i> , <i>Ushana</i> in <i>Veerya</i> , <i>Deepan</i> , <i>Pachan</i> , <i>Tikshna</i> , <i>Laghu</i> , <i>Grahi</i> , <i>Hridya</i> , <i>Vat kaphanashak</i> Ripe Fruits - <i>Madhur</i> , <i>Anurasa</i> , <i>Guru</i> , <i>Vidahi</i> , <i>Vishtambhi</i> , <i>Durjar</i> , <i>Doshkar</i> , <i>Diminished</i> , <i>Jathragni</i> , Rot smelling due to <i>Apanvayu vikruti</i>	Unripe fruit - <i>Snigdha</i> in <i>guna</i> , <i>Sangrahi</i> <i>Deepan</i> , <i>Katu Tikta</i> , <i>Kashaya</i> in <i>Rasa</i> , <i>Tikshna</i> , <i>Vata Kapha shamak</i> . Ripe fruit - <i>Madhur</i> <i>Anurasa</i> , <i>Guru</i> in <i>guna</i> , <i>Vidahi vishtambhakar</i> , Rot smelling due to <i>Apanvayu vikruti</i>
<i>Bilva Peshika</i> (Dry pulp)	----	<i>Kapha</i> , <i>Vata</i> , <i>Aam</i> , <i>Shoolnashak</i> , <i>Malarodhak</i>	<i>Kaphavata shamak</i> , <i>Aam packak</i> , <i>Grahi</i> , <i>Shoolhar</i>	----

BOTANICAL DESCRIPTION¹⁴ –

A moderate size tree 6.0 – 7.5 m. high, Branches armed with straight sharp axillary. 2.5 cm long spine leaves trifoliate, occasionally digitate, Five foliate, leaflets ovate or ovate lanceolate acuminate, crenate, lateral sessile, terminal long petioled. Flowers greenish white, in short axillary panicles, fruits globose grey or yellowish, rind woody. Seeds many, oblong, embedded in sacs covered with thick orange coloured sweet pulp.

ROGAGHANTA –

In Ayurvedic text *Bilva* is described to treat *Ātisara*, *Pravahika*, *Agnimandya*, *Grahani*, *Raktatisara*, *Vibandha*, *Visuchika*, *Raktarsha*, *Vaman* etc.¹⁴

Chemical constituents –¹⁵

- Marmelosin
- Aegelin
- Aegelinin
- Marmin
- Musilaze
- Poptine
- Sugar
- Volatile oil etc

PARTS USED –¹⁶

Root, leaf, fruits, Bark

- For *churna* use unripe fruits
- For *Murabba* use underdone fruit
- For *Panak* use ripe fruits
- For *Doshmoola kwatha* use *moola* (Root) of *Bilva*.

ACTION & USES –¹⁷**ROOTS –**

The roots are sweet astringent, bitter and febrifuge, useful in diarrhea, dysentery, dyspepsia, gastralgia, palpitation, seminal weakness, uropathy, vomiting, intermittent fever, swelling & gastric irritability in infants.

LEAVES –

Are astringent, laxative and expectorant and useful in ophthalmia, deafness, diabetes

UNRIPE FRUITS –

Are bitter, acid, sour, astringent digestive and stomachic and are useful in diarrhoea, dysentery and stomachalgia.

RIPE FRUITS –

Are astringent sweet, aromatic cooling, febrifuge, laxative and tonic and are good for heart and brain and in dyspepsia.

PHARMACOLOGICAL ACTIVITY PROVED IN PREVIOUS RESEARCH WORKS –

The crude extracts of *Bilva* are reported widely to act as antidiabetic¹⁸, anti-inflammatory and analgesic¹⁹, antihyperglycemic and antidyslipidemic,²⁰ antidiarrhoeal²¹, oral hypoglycaemic²², antifungal²³, anticancer²⁴, antiviral²⁵, radioprotective²⁶, cardioprotective²⁷, and antispermatogenic²⁸ agents. Recent studies demonstrate the curative effects of the ethanolic extract of *Bilva* plants against 2,4,6-trinitrobenzene sulfonic acid (TNBS) – induced colitis in rats through its anti-bacterial and anti-oxidant²⁹ properties. Thus there is extensive data on the use of leaves, bark, roots, fruits and seeds of *Bilva* in *Ayurveda* for prevention and treatment of variety of inflammatory diseases.

RELIGIOUS BELIEFS –³⁰

Eartiest evidence of religious importance of *Bael* trees are considered an incarnation of goddess *Parvati*. *Bael* trees can be usually seen near that hindu temples. It is believed that hindu deity lord Shiva is fond of *bael* trees and its leaves and fruits still play a main role in his worship.

CONCLUSION –

Bilva is common easily available and well known drug in community with very high therapeutic values since vedic period the present review of *Bilva* can be beneficial to know about properties of various part of *Bilva* mentioned in various *Nighantus*. This article will be useful in giving importance to other therapeutic extension.

REFERENCES –

1. Ayurvedic Pharmacopoeia of India, Govt. of India, Ministry of health and family welfare, dept. of AYUSH, New Delhi, part 1, vol. 4, p. 12
2. Rawat RBS, Uniyal RC (2003). National medicinal plant board committed for overall development of the sector. *Agro. Bios. Med. Plant*, 1: 12-16.
3. Dravyaguna Vijnana Vol II, Prof PV. Sharma, Chaukhamba Bharti academy reprint 2018.
4. Mukherjee Pulok, Quality control of Herbal drugs: An approach to evaluation of Botanicals, Buisness horizons pharmaceutical publishers, third reprint 2008.
5. Ayurvedic Pharmacopoeia of India, Govt. of India, Ministry of health and family welfare, dept. of AYUSH, New Delhi, part 1, vol. 4, p. 12
6. Vanoshadhi Nigdarshika writer Raam Sushil Singh Uttarpradesh Hindi Sansthan Reprint 2008
7. Dravyaguna Vijnana Vol II, Prof PV. Sharma, Chaukhamba Bharti academy reprint 2018.
8. CARAKSAMHITA of Agnivesa elaborated by CARAK and Redacted by DRDHABALA Vol – I by Acharya Vidhyadhar Shukla Prof. Ravi dutt Tripathi, Chaukhamba Sanskrit Pratishthan Delhi reprint 2011
9. Susrutsamhita Part I by Kaviraja Ambikadutta Shastri Chaukhambha Sanskrit Sansthan Varanasi- 2003
10. Bhavaprakash Nighantu – commentary by Dr. K.C. Chunekar Edited by Dr. G.S. Pandey Reprint 2002 Chaukhambha Bharti Academy.
11. Shaligram Nighantu Bhusnam, Khemraj Prakashan Mumbai.
12. Kaiyadeva – Nighantu (Pathyapathya – Vibodhakah) Edited and translated by prof. Priyavrata Sharma & Dr. Guruprasad Sharma, Chaukhamba Orientalia first edition 1979.
13. Dhanwantari Nighantu Edited & Translated by Dr. Jaharkhande Ojha ChaukhambaSurbharti Publication Varanasi Edition 2004.
14. Database or Medicinal plants used in Ayurveda, Volume I, P.C. Sharma, M.B. Yelne, T.J. Dennis, central council for Research in Ayurveda & Siddha. Reprinted 2002
15. Dravyaguna Vijnana Vol II, Prof PV. Sharma, Chaukhamba Bharti academy reprint 2018.
16. Bhavaprakash Nighantu – commentary by Dr. K.C. Chunekar Edited by Dr. G.S. Pandey Reprint 2002 Chaukhambha Bharti Academy.
17. Database or Medicinal plants used in Ayurveda, Volume I, P.C. Sharma, M.B. Yelne, T.J. Dennis, central council for Research in Ayurveda & Siddha. Reprinted 2002
18. M.C. Sabu, R. Kuttan Antidiabetic activity of Aegle marmelos and its relationship with its antioxidant properties Indian J Physiol pharmacol, 48 (1) (2004), pp. 81-88
19. V. Arul, S. Miyazaki, R. Dhananjayan Studies on the anti-inflammatory, antipyretic and analgesic properties of the leaves of Aegle marmelos *Corr J Ethnopharmacol*, 96 (1–2) (2005), pp. 159-163
20. T. Narender, S. Shweta, P. Tiwari, K. Papi Reddy, T. Khaliq, P. Prathipati, et al. Antihyperglycemic and antidyslipidemic agent from Aegle marmelos *Bioorg Med Chem Lett*, 17 (6) (2007), pp. 1808-1811
21. R. Mazumder, S. Bhattacharya, A. Mazumder, A.K. Pattnaik, P.M. Tiwary, S. Chaudhary Antidiarrhoeal evaluation of Aegle marmelos (Correa) Linroot extract *Phytother Res*, 20 (1) (2006), pp. 82-84
22. E.H. Karunanayake, J. Welihinda, S.R. Sirimanne, G. Sinnadorai Oral hypoglycaemic activity of some medicinal plants of Sri Lanka *J Ethnopharmacol*, 11 (2) (1984), pp. 223-231
23. B.K. Rana, U.P. Singh, V. Taneja Antifungal activity and kinetics of inhibition by essential oil isolated from leave of Aegle marmelos *J Ethnopharmacol*, 57 (1) (1997), pp. 29-34
24. E. Lambertini, I. Lampronti, L. Penolazzi, M.T. Khan, A. Ather, G. Giorgi, et al. Expression of estrogen receptor alpha gene in breast cancer cells treated with transcription factor decoy is modulated by Bangladeshi natural plant extracts *Oncol Res*, 15 (2) (2005), pp. 69-79
25. L. Badam, S.S. Bedekar, K.B. Sonawane, S.P. Joshiln vitro antiviral activity of bael (Aegle marmelos) upon human coxsackievirus B1-B6J *Commun Dis*, 34 (2) (2002), pp. 88-99
26. G.C. Jagetia, P. Venkatesh, M.S. Baliga Evaluation of the radioprotective effect of bael leaf (Aegle marmelos) extract in micelnt *J Radiat Biol*, 80 (4) (2004), pp. 281-290
27. S.K. Haravey A preliminary communication of the action of Aegle marmelos (Bael) on heart *Indian J Med Res*, 56 (3) (1968), pp. 327-331
28. A. Chauhan, M. Agarwal, S. Kushwaha, A. Mutreja Suppression of fertility in albino rats following the administration of 50% ethanolic extract of Aegle marmelos, *Contraception*, 76 (6) (2007), pp. 474-481
29. R.R. Ghatule, M.K. Gautam, S. Goel, A. Singh, V.K. Joshi, R.K. Goel Protective effects of Aegle marmelos fruit pulp on 2,4,6-trinitrobenzene sulfonic acid-induced experimental colitis *Pharmacogn Mag*, 10 (2014), pp. S147-S152 <https://em.m.wikipedia.org>
30. <https://em.m.wikipedia.org>