

DECODING THE LEXICON OF AMALAKI: A REVIEW OF CLASSICAL NIGHANTU LITERATURE AND MODERN PHYTOPHARMACOLOGICAL CORRELATIONS

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ABSTRACT

Amalaki (*Phyllanthus emblica* Linn.)—often called Indian Gooseberry—has held a special place in traditional Indian medicine for thousands of years. Best known as the cornerstone of classic Ayurvedic remedies like *Chyawanprash* and *Triphala*, this humble fruit is revered as a powerful *Rasayana*, or natural rejuvenator, meant to promote longevity and overall vitality. What makes Amalaki stand out in Ayurveda is its rare taste profile: it carries five of the six recognized tastes (sour, sweet, bitter, pungent, and astringent), missing only salt. Combined with its cooling nature and sweet post-digestive effect, it works uniquely well to harmonize all three doshas (*Vata*, *Pitta*, and *Kapha*). Beyond ancient wisdom, modern science heavily supports its health benefits. Packed with natural Vitamin C, potent tannins (like emblicanin A and B), and antioxidant-rich polyphenols, Amalaki helps protect cells from

damage. Clinical and laboratory research continues to confirm its wide-ranging therapeutic benefits—showing that it boosts immune function, protects the liver and heart, helps manage blood sugar levels, and fights inflammation. Ultimately, Amalaki serves as a perfect bridge between traditional botanical wisdom and modern preventive medicine.

KEYWORDS: *Phyllanthus emblica*, Amalaki, Indian Gooseberry, Herbal Rejuvenation, Natural Antioxidant, Ayurveda.

INTRODUCTION

In recent decades, global healthcare paradigms have witnessed a profound shift toward integrative medicine, driven by an escalating recognition of traditional botanical remedies. The World Health Organization (WHO) has actively prioritized the integration of traditional, complementary, and integrative medicine (TCIM) into mainstream primary healthcare systems.^[1] This commitment is exemplified by the establishment of the WHO Global Traditional Medicine Centre (GTMC) and the launch of the *Global Traditional Medicine Strategy 2025–2034*, which aim to bridge ancient health wisdom with modern scientific rigor through evidence-based research, standardized quality frameworks, and global safety monitoring.^[1,2] Supported by international policy frameworks and substantial research funding worldwide, traditional medical systems—most notably Ayurveda—are undergoing extensive scientific evaluation to validate their classical therapeutic claims.^[2,3]

Among the vast ocean of ancient wisdom of Ayurveda, Amalaki (*Phyllanthus emblica* Linn., syn. *Emblica officinalis* Gaertn.), commonly known as Indian Gooseberry, holds a paramount status.^[3,4] Classified in classical Ayurvedic literature as a premier *Rasayana* (rejuvenating agent), Amalaki is renowned for promoting longevity, enhancing immunity (*Ojas*), and delaying cellular aging.^[4] The drug finds detailed mention across major classical texts (*Brihatrayee*) and specialized treatises (*Nighantus*)—such as *Bhavaprakash Nighantu*, *Dhanvantari Nighantu*, *Raj Nighantu*, *Kaiyadeva Nighantu*, and *Madanapala Nighantu*.^[4,5] These ancient texts meticulously categorize Amalaki based on its *Namarupa* (morphological nomenclature), *Gana/Varga* (pharmacological classification), and *Rasapanchaka* (pharmacodynamic properties).^[5] Notably, Amalaki is one of the rare single-herb remedies possessing *Pancha Rasa* (five of the six tastes, lacking only *Lavana* or salty), with a dominant *Amla* (sour) and *Kashaya* (astringent) taste, *Seeta* (cooling) *Virya*, and *Madhura* (sweet) *Vipaka*, enabling it to act as a potent *Tridoshashara* (balancing Vata, Pitta, and Kapha), with a primary affinity for pacifying vitiated *Pitta dosha*.^[4,5]

Modern phytochemistry and pharmacology have increasingly corroborated these classical Ayurvedic concepts.^[3,4] Phytochemical analyses reveal that *P. emblica* fruits are exceptionally rich in bioactive secondary metabolites, including hydrolysable tannins (emblicanin A and B, punigluconin, pedunculagin), gallic acid, ellagic acid, flavonoids (quercetin, rutin), and

ascorbic acid (Vitamin C).^[3,4] This unique, synergistically acting phytochemical matrix imparts a broad spectrum of verified pharmacological activities, including potent antioxidant, anti-inflammatory, immunomodulatory, hepatoprotective, cardioprotective, gastroprotective, and antidiabetic properties.^[3,4,6]

While extensive modern literature evaluates the individual biochemical properties of *P. emblica*, a comprehensive synthesis correlating its modern pharmacological mechanisms with its classical references across various Ayurvedic Nighantus remains vital.^[4,5] This review paper aims to bridge this research gap by providing a detailed pharmacological appraisal of Amalaki, systematically reviewing its textual descriptions in traditional Nighantus alongside contemporary pharmacological evidence.

Taxonomic Classification^[7]

Kingdom: Plantae (Plants)

Division: Angiospermae (Flowering plants)

Class: Magnoliopsida (Dicotyledons)

Order: Malpighiales

Family: Phyllanthaceae (or Euphorbiaceae)

Genus: *Phyllanthus*

Species: *Emblica*

Classical names

Amalaki, Vayasya, Vrishya, Dhatriphala, Amritaphala, Amalaka, Tishyaphala.

Vernacular name^[8]

Eng- *Emblic myrobalan, Indian gooseberry.*

Hindi- *Amalaki, Amalak, Amvala, Aonla, Amla*

Beng. *-Amla, Amalaki, Ambolati, Amulati*

Guj. *-Bhosa, Amla, Ambala*

Kan. *-Nellka, Nelli, Nilika*

Mal. *-Nellimaram, Nellikka, Boa-malacca*

Mar. *-Avala.*

Punj. *-Ambal, Ambli, Amla*

Tam. *-Nelli, Nelli-kai, Toppi*

Tel. *-Usirikaya, Amalakamu, Usereki, Wusheriko, Osirka, Usri, Usirika*

Oriya- Gondhona, Amalaki, Ohalu

[illegible]

Amalaki (*Emblica officinalis* Gaertn.) is a well-known plant the fruit of which is used. It is purifying (*Amala*), *Rasayana* (*Amrita*, *Amrtaphala*), maintains youthfulness (*Vayahstha*), sustains and promotes dhatus (*Dhatri*), prolongs life (*Vayasya*) and virility (*Vrishya*) and is beneficial in all ways (*Sivam*). The fruit is round (*Vrittaphala*), weighing one kola (5 gm.) each (*Kolam*), has six rasas (*Sadrasa*) and *Sitavirya* (*Sitaphala*). Fruit juice is useful (*Jatiphala-rasa*).^[9]

Historical Background

Amalaki or *Dhattri*, a medicinal plant, has been in use for several centuries. It is mentioned in various ancient texts. There are various references of *Amalaka* in Ramayana, ayodhya kanda along with other plants.^[10]

Dhattrika or *Dhattri* which means earth or mother particularly the nursing mother, perhaps because of its nourishing juicy fruit is a tree associated with both Siva and Vishnu. In Brihaddharma Purana there is a mention about the sacredness of the tree both to Parvati and Lakshmi, the wives of Siva and Vishnu respectively. According to the legend, both the goddesses went to Prabhasa, a sacred place to worship. Parvati said to Lakshmi that she wished to worship Vishnu through a new material. Lakshmi answered that she also wished to worship Siva through a new material. At that the two goddesses wept and from their tears were created *Dhattri* or the *Amalaki* tree which both propitiated to worship Siva and Vishnu and since then the leaves of this tree are considered essential in the worship of Siva and Vishnu. The tree is worshipped on Sivaratri day. It is surrounded by red and yellow thread and flowers and fruits are offered to the tree just as in any other worship. It is considered as one of the most sacred trees in Gujarat. In the month of Kartik (Oct.-Nov.) women worship the tree with flowers, sandal paste and vermillion, particularly on the 9th day of Kartik, called Akshaya Navami when women worship it for begetting male progeny. They make five circumambulations round the tree and tie sacred thread round its trunk each time. *Amalaki* is a plant which transformed itself into a beautiful woman to entice Vishnu away from the charms of Vrinda. The tree is very sacred to the Hindus and credited with magical properties by the tribesmen. This plant which is of great medicinal value is planted on the South side of the temple or home.^[11]

There is mention of *Amalaki* in Mahabharata, Tirthayatra Parva along with other plants like *Haritaki*, *Ueeveetaki*, *Inguda*, *Karamarda*.^[12]

Amla is mentioned in *Jaiminiya Upnishad Brahmana* (1.38.6) which is earlier name of *Amalaka* mentioned first in *Chandogya Upanishad* (7.3.1).^[13]

Literature review

A) Samhitakala

Maximum number of references is quoted in Charaka Samhita (113) followed by Sushruta samhita (68). Astanga Hridaya has listed minimum number of references of *Amalaki* (52) in comparison to the above two.

In **Charaka Samhita** total 113 references were found in 42 different Adhyayas of 5 different Sthanas. In Sutra Sthana 22, Vimana Sthana 4, Chikitsa Sthana 76, Kalpa Sthana 9 and in Siddhi Sthana 2 references were mentioned. Out of 76 references in Chikitsa Sthana maximum 10 times it is used in Rasayana adhyay (1-1). In **Sushruta Samhita** total 68 references are scattered in 35 Adhyayas of 4 Sthanas. In Sutra Sthana 13, Chikitsa Sthana 16, Kalpa Sthana 2, Uttaratantra 37 references are quoted. In Jwara Chikitsa maximum 8 references were found.

In Astanga Hridaya total 52 numbers of references are divided into 26 different Adhyayas of 4 different Sthanas. Maximum 25 references are found in Chikitsasthana followed by Uttaratantra 22, Sutrasthana 4, Kalpasthana 1.

B) Nighantu Kala

Table No. 1: Showing Synonyms As Per Different Nighantu.

S.N.	SYNONYMS	DN	HDN	MPN	RN	KN	BN	SGN	NA	MN	PN
1	<i>Amalaka</i>	+	-	+	+	-	+	-	-	-	-
2	<i>Amalaki</i>	-	+	-	-	-	+	+	+	+	+
3	<i>Amrita</i>	-	-	-	+	-	+	+	+	+	-
4	<i>Amrita phala</i>	+	-	+	+	-	+	-	+	+	-
5	<i>Amritodbhava</i>	-	-	-	+	-	-	-	-	-	-
6	<i>Dhatri</i>	-	+	-	-	-	+	+	+	+	+
7	<i>Dhatrphala</i>	+	-	+	+	-	+	-	-	-	-
8	<i>Divya</i>	-	-	-	+	-	-	-	-	-	-
9	<i>Jati phalarasa</i>	+	-	-	+	-	+	-	-	+	-
10	<i>Kola</i>	-	-	-	+	-	-	-	-	-	-
11	<i>Sheeta phala</i>	-	-	-	+	-	-	-	-	-	-
12	<i>Shiva</i>	+	+	+	-	-	+	+	-	+	-
13	<i>Sidhu phala</i>	-	-	-	+	-	-	-	-	-	-
14	<i>Sidhu rasa</i>	-	-	-	+	-	-	-	-	-	-
15	<i>Tishya phala</i>	-	-	-	+	-	+	+	+	+	-
16	<i>Vayastha</i>	+	-	+	+	-	+	+	-	+	-
17	<i>Vrishya</i>	+	-	+	+	-	+	+	-	+	-

“+” denotes same name was mentioned in various Nighantu. “-” denotes this name was not mentioned. DN- Dhanvantari Nighantu, HDN- Hridaya Deepak Nighantu, MPN- Madanpal Nighantu, RN- Raj Nighantu, KN- Kaiyadev Nighantu, BN-Bhav Prakash Nighantu, SGN- Saligram Nighantu, NA- Nighantu Adarsh, MN- Madanadi Nighantu, PN- Priyo Nighantu.

The study in the “Table 1” represents the various synonyms given by different Acharyas in different Nighantus belonging to different time periods. Some of the most common synonyms

used by the Acharyas are -Amalaka, Amrita, Amrita Phala, Dhatri, Shiva, Vrishya, Vayastha and Tishya Phala. Most number of Synonyms was mentioned by “Raj Nighantu”.

Table No. 2: Showing The Classical Categorization Of Amalaki In Samhitas & Nighantus.

S.N.	TEXTS	VARGA/GANA
1	Caraka Samhita	Jwaraghna Kasaghna Virecanopaga Vayasthapana Kushthaghna Swasahara Jwaraghna
2	Sushruta Samhita	Triphala Parushakadi Mustadi Amalakyadi
3	Astanga Samgraha	Kushthaghna Kasahara Jwarahara Garbhasthapana Vayasthapana
4	Astanga Hridaya	Virecanagana Parushakadi Mustakadi Mustadi
5	Dhanwantari Nighantu	Guduchyadi varga
6	Hridaya Deepaka Nighantu	Dwipada varga
7	Madanapala Nighantu	Haritakyadi varga
8	Raja Nighantu	Amradi varga
9	Kaiyadeva Nighantu	Aushadhi varga
10	Bhavprakash Nighantu	Haritakyadi varga
11	Shaligrama Nighantu	Haritakyadi varga
12	Nighantu Adarsha	Amalakyadi varga
13	Mahaushada Nighantu	Haritakyadi varga
14	Priya Nighantu	Haritakyadi varga

Table No. 3: Showing Rasa, Guna, Virya And Vipaka Of Amalaki According To Various Nighantus.

RASAPANCHAK		TEXTS						
		BN	MPN	KN	RN	DN	SN	PN
Rasa	MADHURA	+	+	+	+	+	+	+
	AMLA	+	+	+	+	+	+	+
	KATU	+	—	+	+	+	—	+
	TIKTA	+	—	+	+	+	—	+
	KASAYA	+	+	+	+	+	+	+

Guna	GURU	+	—	—	—	—	—	—
	SITA	—	+	—	+	—	—	—
	RUKSHA	—	+	+	—	+	+	—
	LAGHU	—	—	—	+	—	+	+
VIRYA	SITA	+	—	+	—	+	+	+
VIPAKA	MADHURA	+	—	—	—	—	+	—

“+” denotes same *Rasa*, *Guna*, *Virya* & *Vipaka* was mentioned in various Nighantu. “-” denotes this *Rasa*, *Guna*, *Virya* & *Vipaka* was not mentioned. DN- Dhanvantari Nighantu, MPN- Madanpal Nighantu, RN- Raj Nighantu, KN- Kaiyadev Nighantu, BN-Bhav Prakash Nighantu, SN- Sodhal Nighantu, PN- Priyo Nighantu.

Most of the acharyas believe that *Amalaki* has *Madhura*, *Amla*, *Katu*, *Tikta* and *Kasaya* rasa, *Ruksha* guna And *Sita* virya respectively.

Botanical description

Tree: *Āmla* tree is 5-25 metres tall deciduous tree with a canopy spread of approximately 30 feet.^[14] It has a crooked and knarled trunk upto 35 cm in diameter with a thin, smooth, grey bark peeling in patches. The main branches are angular and densely pubescent. The branchlets are glabrous or finely pubescent, 10-20 cm long.

Leaves: Leaves on the main branches are deltoid-squamiform, resembling stipules. Those on the branchlets are biseriate, alternate, thin, subsessile, narrowly oblong, 5-25 mm in length resembling pinnate leaves.

Flowers: Flowers are greenish yellow in colour, fascicled in the axils of leaves. The male flowers are more concentrated at the base of young twigs; the female flowers are solitary and higher up the twig.

Fruit: *Āmla* fruit is depressed, globose, 2-4 cm in diameter, having six vertical striations over the surface, pale green in colour which turns to yellow with maturation. The fruit epicarp is thin, translucent, and strongly adhered to the crisp and juicy mesocarp. A hexagonal stone is embedded in the centre of mesocarp which has three slightly dehiscent compartments, each usually containing two trigonous, 4-5 mm x 2-3 mm seeds.^[15]

Flowering and fruiting: Pale green coloured flowers grow in small dense clusters between the months of March-May in northern regions of India. However, the flowering pattern is

altered in southern states.^[15] In Tamil Nadu, *Āmla* flowers in the months of June-July and again in February-March.^[14]

Varieties

Two varieties of *Amalaki* are found:

1. Gramya- The fruits are big, soft and fleshy.
2. Banya- The fruits are small and hard in nature.^[16]



FIG. 1- Fruit of Amalaki



FIG. 2- Flower of Amalaki



FIG. 3- Seed of Amalaki



FIG. 4- Leaves of Amalaki



FIG. 5- Bark of Amalaki



FIG. 6- Whole plant of Amalaki

FIG. 1- <https://lifspa.com/herbs-supplements/amalaki-everyday-benefits/>

FIG. 2- https://www.google.com/search?sca_esv=950999559134ba52&sxsrf=APpeQntfIyFotq7p_ml8WRibojoAzN_oqQ:1787592538824&udm=2&fbs=ABfTbFVyMZGZf1hf

FIG. 3- https://www.google.com/search?q=amalaki+seed&sca_esv=950999559134ba52&udm=2

FIG. 4- https://www.google.com/search?sca_esv=950999559134ba52&sxsrf=APpeQnu18igHWKmHGrv4PZOotWfkuDeIAw:1787593555623&udm=2&fbs=

FIG. 5- https://www.google.com/search?sca_esv=2f28bbc590372d55&sxsrf=APpeQntQyfHhikO

FIG.

6-

https://www.google.com/search?sca_esv=2f28bbc590372d55&sxsrf=APpeQnuQ13lLcXA5zXHpcDSLM7J3OLPEkg:1787626212326&udm=2&fbs=ABfTbFVyMZGZf1hfvX9uKjN_-

DISTRIBUTION

Throughout tropical and subtropical India, chiefly in dry deciduous forests, ascending to 1400 m on the Himalaya, Chota Nagpur, Bihar, Orissa, West Bengal, North Circars, Deccan, Karnataka and in Western ghats.^[17]

Parts used

Root bark, stem bark, leaf, fruit, seed.^[18]

Chemical constituents

A good source of vitamin C, carotene, nicotinic acid, riboflavine, D-glucose, D-fructose, myoinositol and a pectin with D-galacturonic acid, D-arabinosyl, D-xylosyl, L-rhamnosyl, D-glucosyl, D-mandosyl and D-galactosyl residues, embicol, mucic, Indole acetic acid and four other auxins- al, a3, a4 and a5, two growth inhibitors- RI & R2; phyllembic acid and phyllembin (fruits), ellagic acid, flavonols, Quercetin and anthocyanins.^[18]

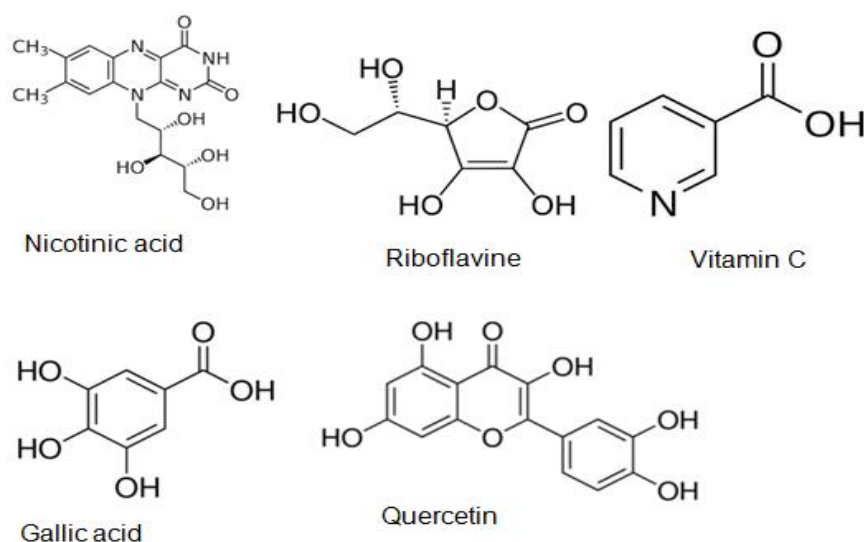


FIG. 7: Showing important phyto-constituents of amalaki.

Macroscopic study

a. Macroscopic characteristics of Fruits of Amalaki

Fresh fruit- The fruits are globose, 2.5-3.5cm in diameter, fleshy, Smooth with six prominent lines; greenish when tender, changing to light yellow or pinkish colour when mature, with a few dark specks. Taste sour and astringent followed by delicately sweet taste.

Dried Mature fruit- It consists of curled pieces of pericarp of dried fruit. Bulk colour grey to black; pieces showing a broad, highly shrivelled and wrinkled external convex surface to somewhat concave, transversely wrinkled lateral surface; external surface shows a few whitish specks, occasionally some pieces show a portion of stony testa. Texture rough, cartilaginous, tough. Taste sour and astringent.



Fig. 8: Showing Dired Fruits Of Amalaki.

b. Macroscopic characteristics of powder of Fruits of Amalaki

Powder is brown in colour, coarse in consistency, tastes sour and astringent.



Fig. 9- Macroscopic structure of powder amalaki fruit.

Microscopic study

a. Powder microscopy of fruit of Amalaki

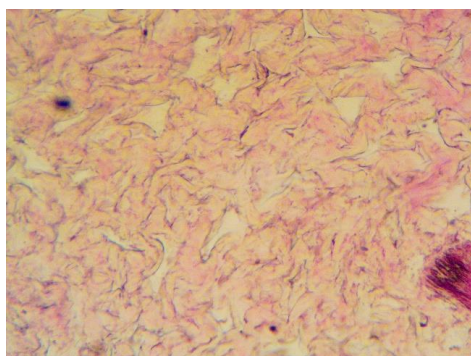


Fig. 10: showing powder microscopy of fruits of amalaki: 1. Sclereids from the endocarp, 2. Epidermal cells, 3. Fibres, 4. Starch grain.

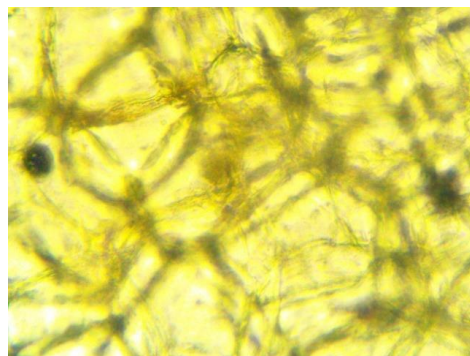
It shows hexagonal, thick, straight-walled epidermal cells in the surface, crystals of silica and simple oval to spherical starch grains scattered as such or embedded in the parenchymatous cells of the mesocarp.

c. Microscopic character of cross section of fruits (dried and raw fruits)

TS of the fruit shows epicarp and mesocarp tissue which forms the bulk of the fleshy portion of the pericarp; epicarp is composed of narrow, thick-walled, tubular cells, covered with thick cuticle, underneath this lies few rows of small sized, compactly arranged, tangentially running cells of hypodermis embedded with silica crystals, the remaining cells of the mesocarp slowly get increased in size, and are embedded with collateral fibro-vascular bundles which anastomose in various directions towards the innerside and hence xylem and phloem at many places are not seen clearly; pitted thin walled stone cells, thick-walled sclereids, pitted parenchyma and tannin cells are embedded throughout the mesocarp while fibres being more located towards its inner region.



(a)



(b)

FIG. 11: Showing cross section of fruit of Amalaki: (a)Raw unripe fruit; (b) Dried fruit.

Action and uses

The fruits are astringent, cooling, anodyne, carminative, digestive, stomachic, laxative alterant, alexeteric, aphrodisiac, diuretic, antipyretic, tonic and trichogenous. They are useful in diabetes, cough, asthma, bronchitis, headache, ophthalmic disorders, dyspepsia, colic, flatulence, hyperacidity, peptic ulcer, erysipelas, skin diseases, leprosy, haematemesis, inflammations, anaemia, emaciation, hepatic disorders, jaundice, strangury, diarrhoea, dysentery, intrinsic haemorrhages, leucorrhoea, menorrhagia, cardiac disorders, intermittent fevers and greyness of hair.^[18]

Ayurvedic properties

Rasa - Amla, Madhura, Kashaya, Tikta, Katu

Guna - Guru, Ruksha, Sheeta

Veerya - Sheeta

Vipakaa – Madhura

Doshaghnata - Tridoshashamaka, especially Pittashamaka

Rogaghnata - Paittikavikara, Daha, Paittikashirashoola, Mootravarodha, Netraroga, Khalitya, Palitya, Mastishkadaurbalya, Drishtimandya, Indriyadaurbalya, Aruchi. Trishna, Agnimanda, Vibandha, Yakidvikara, Amlapitta, Parinamashoola, Udavarta, Udararoga, Arsha Hridroga, Raktapitta, Raktavikara, Kasa, Shwasa, Yakshma, Shukrameha, Pradara, Garbhashayadaurbalya, Mootrakrichchhra, paittikaprameha, Kushtha, Visarpa, Charmaroga, Jeernajwara, Kshaya, Daurbalya, Daha, Shotha.

Karma- Dahaprashamana, Chakshushya, Keshya, Medhya, Nadibalya, Balya, Rochana, Deepana, Anulomana, Amlatanashaka, Yakriduttejaka, Stambhana, Sransana, Hridya, Shonitasthapana, Kaphaghna, Vrishya, Garbhasthapana, Mootrala, Pramehaghna, Kushthaghnna, Jwaraghna, Rasayana.

Doses - Fruit powder- 3-6 gm.; Fresh juice- 10-20 ml,

Pharmacological activities

Some of the important pharmacological activities with its references are as follows

Antihyperglycemic activity- Different concentrations of quercetin showed remarkable antihyperglycemic effects and potent defense mechanisms in STZ-induced diabetic rats.^[19]

Hypolipidemic activity- Fruits of Amla showed significant anti-hyperlipidemic, hypolipidemic and anti-atherogenic effect.^[20]

Anti-fungal activity- The antifungal activity study showed that Ethyl acetate extract of *Emblica officinalis* was able to give maximum zone of inhibition against *Trichoderma viridae* followed by methanol and aqueous extracts at 100 mg/ml. Hexane extract of *Emblica officinalis* slightly inhibited *A. niger* (ZOI = 9.5 ± 0.5).^[21]

Antioxidant activity- *Phyllanthus emblica* possess antioxidant and predominantly responsible for cytoprotective action in Non steriodal antiinflammatory drug induced ulcer.^[22] Other important Pharmacological activities are- Spasmolytic, mild CNS depressant, antiatherosclerotic, antimutagenic, immunomodulatory, antitumour, antiinflammatory, antibacterial, antiulcer, adrenergic potentiating, HIV-1 reverse transcriptase inhibitory action.

FORMULATIONS AND PREPARATIONS

Brahmarasayana, Chyavanaprasha, Dhatri Lauha, Dhatri Rasayana, Triphala churna, Amalakyavaleha, Amalakyadi kvatha, Brihachchhagaladya ghrita, Phalarishta, Dhatriyarishta.

REFERENCES (VANCOUVER STYLE)

1. World Health Organization. Global Traditional Medicine Strategy 2025–2034. Geneva: World Health Organization; 2025.
2. World Health Organization. Research & Evidence - WHO Global Traditional Medicine Centre [Internet]. Geneva: World Health Organization; 2024 [cited 2026 Aug 4]. Available from: <https://www.who.int/teams/who-global-traditional-medicine-centre/research-and-evidence>
3. Grover M. A comprehensive review on Pharmacological and Ayurvedic aspect of *Phyllanthus emblica* (Amalki). *Advance Pharmaceutical Journal.*, 2021; 6(3): 87–94.
4. ResearchGate. An in-depth review on phytochemistry and pharmacological significance of *Phyllanthus emblica* Linn [Internet]. 2024 [cited 2026 Aug 4]. Available from: <https://www.researchgate.net/publication/385691711>
5. Chuneekar KC, Pandey G, editors. *Bhavaprakash Nighantu of Sri Bhavamisra*. Varanasi: Chaukhambha Bharati Academy; 2018.
6. Scartezzini P, Speroni E. Review on some plants of Indian traditional medicine with antioxidant activity. *Journal of Ethnopharmacology.*, 2000; 71(1-2): 23–43.
7. https://en.wikipedia.org/wiki/Phyllanthus_emblica.

8. Sharma P.C. Yelme M.B., Dennis T.J., Database on Medicinal Plants Used in Ayurveda, vol. 3, Central Council for Research in Ayurveda & Siddha, Department of Indian system of medicine, Govt. of India, New Delhi, 2005, Pg- 11-56.
9. Sharma PV, Namrupajnanam, Characterization of Medicinal Plants based on etymological derivation of names and synonyms, Chaukhambha Visvabharati, Pg- 23-25.
10. Valmiki Ramayana, Book II: Ayodhya Kanda-Book of Ayodhya, Chapter [Sarga] 91.
11. Shakti M. Gupta; PLANT MYTHS & TRADITIONS IN INDIA.
12. The Mahabharata, Tirthayatra Parva.
13. Dr. Sood T, Dr Upadhyaya A. Fruits in classical texts of Ayurveda- A Review; wjpmr, 2019; 5(3): 204-214.
14. Sud RK, Kumar S. Herbs: Culinary, medicinal, aromatic (Secrets and Human Happiness) Jodhpur: Scientific Publishers; 2004.
15. Lim TK. Edible medicinal and nonmedicinal plants. New York: Springer Science + Busuiness Media B. V.; 2012.
16. Sharma. P.V, Dravya Guna, 2nd part, Choukhamba orientalia, Varanasi, Amalaki, page- 758-760.
17. Sharma P.C. Yelme M.B., Dennis T.J., Database on Medicinal Plants Used in Ayurveda, CCRAS, 2005, Volume-3, Pg- 11-56.
18. Sharma P.C. Yelme M.B., Dennis T.J., Database on Medicinal Plants Used in Ayurveda, CCRAS, 2005, Volume-3, Pg- 11-56.
19. Srinivasan P, Subramaniyan V, Kothandaraman S, Palani M; Anti-diabetic activity of quercetin extracted from *Phyllanthus emblica* L. fruit: In silico and in vivo approaches. Journal of Pharmaceutical Analysis, April 2018; 8(2): 109-118. <https://doi.org/10.1016/j.jpha.2017.10.005>
20. Santoshkumar J, Manjunath S, Pranavkumar S, A study of anti-hyperlipidemia, hypolipidemic and atherogenic activity of fruit of *Emblica officinalis* (AMLA) in high fat fed albino rats, International journal of Medical Research & health sciences, year: 2013; volume:1, Issue :2, Pg-70-77.
21. Dharajiya D, Khatrani T, Patel P, Moitra N, Evaluation of antifungal activity of *Emblica officinalis*, Aloe vera and *Vitex negundo* extracts, JCBPS; Section B; August 2015–October 2015; 5(4): 3990-3996.
22. Chatterjee A, Chattopadhyay S, Bandyopadhyay S K- Biphasic Effect of *Phyllanthus emblica* L. Extract on NSAID-Induced Ulcer: An Antioxidative Trail Weaved with

Immunomodulatory Effect, Evid Based Complement Alternat Med. 2011; 2011: 146808.

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