

Therapeutic and Medicinal Significance of Aonla: An Overview

Mayuri M. Manje^{1*}; Kalpana G. Thakare¹; Tanvi H. Zunjarrao¹

¹Department of Pharmacy, Siddhi's Institute of Pharmacy, DBATU University, Nandgaon, Murbad, Thane-421401

Corresponding Author: Mayuri M. Manje*

Publication Date: 2025/11/12

Abstract: Amla (*Emblica officinalis*), also called Indian gooseberry, is an important plant in Ayurveda and Unani medicine. It is rich in natural vitamin C, and also contains fiber, iron, and many antioxidants like gallic acid and quercetin. Amla is used in famous Ayurvedic products such as Triphala and Chyavanprash. Because of its strong nutrients and healing properties, it helps in improving health and treating many diseases. It helps slow down aging by protecting the skin and boosting collagen. Amla is also good for hair, making it strong, shiny, and preventing early greying. It shows anti-diabetic activity by lowering blood sugar and improving insulin function. In addition, Amla has anti-cancer properties that help stop the growth of harmful cells. Overall, Amla is a natural and powerful remedy for health, beauty, and disease prevention. Amla (*Emblica officinalis*), also called Indian gooseberry, is an important plant in Ayurveda and Unani medicine. It is rich in natural vitamin C, and also contains fiber, iron, and many antioxidants like gallic acid and quercetin. Amla is used in famous Ayurvedic products such as Triphala and Chyavanprash. Because of its strong nutrients and healing properties, it helps in improving health and treating many diseases. It helps slow down aging by protecting the skin and boosting collagen. Amla is also good for hair, making it strong, shiny, and preventing early greying. It shows anti-diabetic activity by lowering blood sugar and improving insulin function. In addition, Amla has anti-cancer properties that help stop the growth of harmful cells. Overall, Amla is a natural and powerful remedy for health, beauty, and disease prevention. Amla promotes hair growth, prevents dandruff, and protects hair from sun damage. For the skin, it boosts collagen, reduces wrinkles, and protects against UV damage. Medicinally, Amla helps manage diabetes, exhibits strong anticancer, antioxidant, immunomodulatory, and gastroprotective effects, and is even used to relieve migraine. Its diverse benefits make it a highly valued natural remedy in both ancient and modern medicine.

Keywords: Anti-Aging, Anti-Cancer, Anti-Diabetic, Immunomodulation, Gastro Protection.

How to Cite: Mayuri M. Manje; Kalpana G. Thakare; Tanvi H. Zunjarrao (2025). Therapeutic and Medicinal Significance of Aonla: An Overview. *International Journal of Innovative Science and Research Technology*, 10(11), 260-263. <https://doi.org/10.38124/ijisrt/25nov195>

I. INTRODUCTION

Emblica Officinalis, A Revered Plant in Ayurveda, India's Traditional System of Medicine, Holds A Sacred Place in Ancient Indian Mythology as The First Tree Created in The Universe. As A Member of The Euphorbiaceae Family, Amla or Indian Gooseberry Is a Prized Herb in Ayurveda and Unani Medicine, Renowned for Its Numerous Health Benefits. Among The Many Medicinal Plants in India's Traditional Medicine Systems, Amla Stands Out for Its Widespread Use and Significance.¹ Aonla, Also Known as Amritphal in Ancient Texts, Is Considered a Sacred Tree. It Is Widely Used in Ayurvedic Medicine, Especially in Making Triphala and Chyavanprash. In The 21st Century, It Has Become an Important Fruit Due to Its Many Health Benefits. Aonla Helps in Treating Various Illnesses and Can Be Made into Different Useful Products. Its Powder, Rich in Natural Vitamin C, Is

Better Than Synthetic Supplements for Treating Deficiencies.
2

Amla Is a Nutrient-Dense Fruit, Rich in Fiber, Carbohydrates, Iron, And Notably Vitamin C. In Fact, It's Considered One of The Richest Sources of Vitamin C, Boasting 30 Times More Than Oranges. This Superfruit Is Also Packed with An Array of Bioactive Compounds, Including Apigenin, Gallic Acid, Ellagic Acid, Quercetin, And Luteolin, Among Others. These Potent Antioxidants and Beneficial Components Make Amla a Truly Remarkable Fruit with Immense Health Potential.³ The Fruit of Amla Has High Medicinal Value and Is Commonly Used as A Tonic to Restore Energy and Strength. The Fruit Has Been Extensively Studied for Its Phytoconstituents, Biological Activities, Therapeutic Potential and Shown to Possess a Diverse Spectrum of Activities Viz.⁴

➤ *Classification*

- Synonym: *Emblica Officinalis*, Indian Gooseberry, Emblic Myrobalar
- Kingdom: Plantae
- Order: Geraniales
- Species: *Officinalis* Gearth

➤ *Biological Source:*

- Division: Angiospermae
- Class: Dicotyledonae
- Family: Euphorbiaceae
- Sub Kingdom: Tracheobionta
- Super Division: Spermatophyta



Fig 1 Plant



Fig 2 Amla

➤ *Vernacular Name:*

Table 1 Vernacular Name

Language	Vernacular name
Sanskrit	Amla, Amaliki, Dhatriphala, Amalakan, shriphala
Hindi	Amla
English	Emblica myroblan
Marathi	Awla
Gujrati	Ambla
Tamil	Neli
Malyalam	Nelikayi
Kashmir	Aonla
Bangali	Amolki
Punjabi	Aula

II. TRADITIONAL USES➤ *For Hair:*

Herbs Are Utilized for Enhancing Beauty and Preparing Various Cosmetics. Traditional Systems of Medicine Document Numerous Plant- And Herb-Based Formulations Known to Promote Hair Growth.⁵ Dried Fruits Are Known to Benefit Hair Hygiene and Have Long Been Valued as Key Ingredients in Shampoos and Hair Oils. In Traditional Recipes, Indian Gooseberry Is Recognized as A Natural Hair

Tonic That Enhances Hair Growth and Maintains Pigmentation. The Fixed Oil Extracted from Its Berries Helps Strengthen the Hair and Stimulate Its Growth.⁶

- Amla Contains a High Amount of Vitamin C, Which Strengthens Hair Follicles and Helps Prevent Hair Fall.
- It Possesses Antifungal Properties, Which Aid in Combating Dandruff and Maintaining a Healthy Scalp.

- Tannin And Calcium Present in Amla Help Shield the Hair from Damage Caused by Sunlight and Heat.7

➤ *For Skin:*

Skin aging occurs in two forms intrinsic and extrinsic aging, characterized by dyspigmentation, elasticity decline and wrinkles and fragility. Amla reduces the appearance of wrinkles and fine lines by increasing collagen production and inhibiting enzymes that break down collagen. Intrinsic and skin wrinkle, and extrinsic aging results from accumulated damage caused by UV exposure and also protects skin from the damaging effects of UV radiation. 8 Amla extract increases fibroblast activity and collagen production in a dose-dependent way, which helps in skin firmness and repair. It reduces MMP-1 (an enzyme that breaks down collagen), preventing wrinkles, but does not affect MMP-2. Juice taken for scabies, fruits for dry skin, and paste for skin care.9 Amla protects fibroblasts from UVB damage by reducing oxidative stress (ROS), preventing DNA damage, and showing strong photo-protective and anti-aging effects. It also shows anti-hyaluronidase activity, helping to maintain hyaluronic acid, which keeps skin hydrated and prevents premature wrinkles.10

III. MEDICINAL USES

➤ *For Diabetes:*

Amla extraction by the oral route helps to decrease blood sugar levels and maintain them. 10 Emblica officinalis performs the role of an inhibitor of aldose reductase [AO], which is used to treat eye disease due to diabetes.11

A tablespoon of amla extraction or a little amount of amla extract and some amount of bitter gourd juice, administered for 2 months, can result in stimulating the pancreas and will secrete insulin, hence blood sugar will decrease and be maintained.12

If amla powder, Jamun powder and bitter gourd powder are administered orally in the same ratio, 1 or 2 times daily, they lead to stimulating the islets of Langerhans, which help to secrete insulin.13

➤ *For Cancer:*

Emblica officinalis helps to stop the growth and spread of different types of cancers, such as breast, uterine, pancreatic, stomach, and liver cancers, as well as malignant ascites. The side effects caused by chemotherapy and radiotherapy are minimized by the use of Amla. 14 Similar to other medicinal plants, Emblica officinalis demonstrates remarkable anticancer potential, primarily due to its rich polyphenol content. These bioactive compounds contribute to its anticarcinogenic, anti-inflammatory, and radiation-protective effects, making it a powerful natural agent against cancer.15

The presence of distinctive tannins and flavonoids in Emblica officinalis contributes to its potent antioxidant activity. Experimental studies have demonstrated that the fruit extract effectively inhibits tumor incidence in the two-stage model of skin carcinogenesis.16

➤ *For Migraine:*

Migraine is a severe vascular headache in females rather than men. This is cured by applying the paste made by dried Amla Powder with Kumkum, Neelkamal & rose water.17

➤ *For Immunomodulation:*

Stimulating the immune system is both an effective and protective strategy against new infectious diseases. In a study using albino rats, the immune-modulating effects of Triphala were evaluated on different neutrophil functions such as adherence, phagocytic index, avidity index, and nitro blue tetrazolium activity. Oral administration of Triphala was found to enhance neutrophil functions in immunized rats and effectively prevent the suppression of these functions caused by stress.18

➤ *For Gastroprotection:*

Apart from its nutritional value, Amla can act as a gastroprotective agent against stomach damage caused by non-steroidal anti-inflammatory drugs (NSAIDs). Its therapeutic effect is mainly attributed to its strong antioxidant properties.19

IV. CONCLUSION

Amla (*Emblica officinalis*) represents a potent medicinal fruit with diverse therapeutic properties. Its rich phytochemical composition contributes to multiple pharmacological activities such as antidiabetic, anticancer and migraine effects. Traditional Ayurvedic wisdom and modern pharmacological studies together validate its therapeutic importance for the hair and skin. In conclusion, Amla stands as a promising natural agent with significant potential for modern drug discovery and preventive healthcare.

REFERENCES

- [1]. Anjali Ashokrao Kalamkar, Poonam I Lal, Pankaj H Chaudhary, Dipti B Ruikar . A review on *Emblica officinalis* gaertn. *Int J Pharmacogn Pharm Sci* 5 (1), 111-7, 2023
- [2]. AK Singh, Sanjay Singh, PL Saroj, DS Mishra, PP Singh, RK Singh. Amla (*Emblica officinalis*) in India: A review of its improvement, production and diversified uses. *The Indian Journal of Agricultural Sciences* 89 (11), 1773-1781, 2019
- [3]. Shreenidhi MB, Vikash Kumar, Raj Kumar, Nisarga D D, Deepak Kumar. Health Promotive Phytochemicals of Amla and Their Medicinal Importance.
- [4]. Suraj Singh Yadav, Manish Kumar Singh, Pawan Kumar Singh, Vipin Kumar. Traditional knowledge to clinical trials: A review on therapeutic actions of *Emblica officinalis*. *Biomedicine & Pharmacotherapy* 93, 1292-1302, 2017
- [5]. Jain PK, DJ Dass. Evaluating hair growth potential of some traditional herbs. *Asian J Pharm Clin Res* 8 (6), 150-152, 2015
- [6]. MM Bhide, SA Nitave. Roles of *Emblica officinalis* (aml) in medicine. *World Journal of Pharmacy and Pharmaceutical Sciences* 3 (6), 604-615, 2014

- [7]. Swapnil Kale, H Mohurle, S Mhaske. Optimization and Analysis of Herbal Infused Hair Oil Formulation for Enhance Hair Growth Activity. International Journal of Pharmaceutical Sciences 2 (7), 1587-1608, 2024
- [8]. Korawinwich Boonpisuttinant, Warintorn Ruksiriwanich, Romchat Chutoprapat, Sarinporn Udompong, Rattiya Kansawang, Wirinda Chompoo, Kitrawi Samothai, Ratakorn Srisuttee. Assessment of in vitro anti-skin ageing activities of Giant Indian Gooseberry (*Phyllanthus indofischeri* Bennet) extracts for dermatological health and aesthetic applications.
- [9]. Anand A Zanwar, Sachin L Badole, Rashmi Saini. Role of *Emblica officinalis* in Prevention of Skin Disease. Bioactive Dietary Factors and Plant Extracts in Dermatology, 439-444, 2012
- [10]. Garima Diwan, Kavita Sinha, Narayan Lal, NR Rangare. Tradition and medicinal value of Indian gooseberry: A review. Journal of Pharmacognosy and Phytochemistry 7 (1), 2326-2333, 2018
- [11]. Ali Ikram, Waseem Khalid, Maryam Aziz, Muhammad Adnan Arif, Ravi Prakash Jha, Muhammad Zubair Khalid, C Izza, Muhammad Zarnoor Mehmood, Muhammad Haseeb, Muhammad Abdul Rahim, Sadia Naeem, Fatima Sultana. Nutritional and bio-chemical composition of amla (*Emblica officinalis*) and its therapeutic impact: a review. Acta Scientifica NUTRITIONAL HEALTH (ISSN: 2582-1423) 5 (2), 2021
- [12]. Madhulika Bhagat. Indian gooseberry (*Emblica officinalis*): Pharmacognosy review. Utilis Management Medicine Plants 2, 471-487, 2014
- [13]. KP Sampath Kumar, Debjit Bhowmik, Amitsankar Dutta, Akhilesh Pd Yadav, Shravan Paswan, Shweta Srivastava, Lokesh Deb. Recent trends in potential traditional Indian herbs *Emblica officinalis* and its medicinal importance. Journal of Pharmacognosy and Phytochemistry 1 (1), 18-28, 2012
- [14]. Madhuri Sharma, Govind Pandey, Karuna S Verma. Antioxidant, immunomodulatory and anticancer activities of *Emblica officinalis*: An overview. International Research Journal of Pharmacy 2 (2), 38-42, 2014
- [15]. SYEDA MONA Hassan, SHAHZAD SHARIF Mughal, ASMA Aslam, MARYAM Mushtaq, MUNEEZA Munir, SUMAIRA Pervez, NAGEENA Shabbir, AR Ayub, MUHAMMAD Farman. *Emblica officinalis* (Amla): A prospective review on distinctive properties and therapeutic applications of Amla. Innovare journal of Ayurvedic Sciences 6, 22-30, 2020
- [16]. Kishwar Hayat Khan. Roles of *Emblica officinalis* in medicine-A review. Botany Research International 2 (4), 218-228, 2009
- [17]. Kaushik Vilas Kulkarni, Shrishail M Ghurghure. Indian gooseberry (*Emblica officinalis*): Complete pharmacognosy Review. International Journal of Chemistry Studies 2 (2), 5-11, 2018
- [18]. R Jain, R Pandey, RN Mahant, DS Rathore. A review on medicinal importance of *Emblica officinalis*. International journal of pharmaceutical sciences and research 6 (1), 72, 2015
- [19]. Neerja Sharma. Aonla (*Emblica Officinalis*): A Wonderful Berry with Therapeutic Effects. Society For Advancement of Human and Nature (Sadhna) 12 (3), 1-7, 2022