

Phyllanthus emblica

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(Redirected from Indian gooseberry)

The **Indian gooseberry** (*Phyllanthus emblica*, syn. *Emblica officinalis*) is a deciduous tree of the Euphorbiaceae family. It is known for its edible fruit of the same name.

Common names of this tree include *amalaka* in Sanskrit, *aamla* (આમળા) in Gujarati , *aavala* (आवळा) in Marathi, *amla* (आम्ला) in Hindi, *amlaki* (আমলকী) in Bengali language, *nellikka* (നെല്ലിക്ക) in Malayalam, *nellikai* (நெல்லிக்காய்/ ನೆಲ್ಲಿ ಕಾಯಿ/ ಗುಡ್ಡದ ನೆಲ್ಲಿ) in Tamil and Kannada, *usiri* (ఉసిరి కాయ) in Telugu, *amala* in Nepali, *ma kham pom* in Thai, and *mak kham bom* in Lao.

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Plant anatomy and harvesting

The tree is small to medium sized, reaching 8 to 18 m in height, with a crooked trunk and spreading branches. The branchlets are glabrous or finely pubescent, 10–20 cm long, usually deciduous; the leaves simple, subsessile and closely set along branchlets, light green, resembling pinnate leaves. The flowers are greenish-yellow. The fruit is nearly spherical, light greenish yellow, quite smooth and hard on appearance, with 6 vertical stripes or furrows.

Ripening in autumn, the berries are harvested by hand after climbing to upper branches bearing the fruits. The taste of Indian gooseberry is sour, bitter and astringent, and is quite fibrous. In India, it is common to eat gooseberries steeped in salt water and turmeric to make the sour fruits palatable^[*citation needed*].

Indian Gooseberry



Scientific classification

Kingdom:	Plantae
Division:	Flowering plant
Class:	Magnoliopsida
Order:	Malpighiales
Family:	Phyllanthaceae
Tribe:	Phyllanthae
Subtribe:	Flueggeinae
Genus:	<i>Phyllanthus</i>
Species:	<i>P. emblica</i>

Binomial name

Phyllanthus emblica
L.^[1]

Synonyms

Cicca emblica Kurz
Emblica officinalis Gaertn.
Mirobalanus embilica Burm.
Phyllanthus mairei Lév.

Medical research

Indian gooseberry has undergone preliminary research, demonstrating in vitro antiviral and antimicrobial properties.^[2] There is preliminary evidence in vitro that its extracts induce apoptosis and modify gene expression in osteoclasts involved in rheumatoid arthritis and osteoporosis.^[3]

Experimental preparations of leaves, bark or fruit have shown potential efficacy against laboratory models of disease, such as for inflammation, cancer, age-related renal disease, and diabetes.^{[4][5][6]}

A human pilot study demonstrated reduction of blood cholesterol levels in both normal and hypercholesterolemic men.^[7] Another very recent study with alloxan-induced diabetic rats given an aqueous amla fruit extract has shown significant decrease of the blood glucose as well as triglyceridemic levels and an improvement of the liver function caused by a normalization of the liver-specific enzyme alanine transaminase (ALT) activity.^[8]

Although fruits are reputed to contain high amounts of ascorbic acid (vitamin C), 445 mg/100g,^[9] the specific contents are disputed and the overall antioxidant strength of amla may derive instead from its high density of tannins and other polyphenols.^[10] The fruit also contains flavonoids, kaempferol, ellagic acid and gallic acid.^{[10][11]}

Traditional uses

Medicinal use

In traditional Indian medicine dried and fresh fruits of the plant are used. All parts of the plant are used in various Ayurvedic/Unani Medicine [Jawarish Amla] herbal preparations, including the fruit, seed, leaves, root, bark and flowers.^[12] According to Ayurveda, amla fruit is sour (amla) and astringent (kashaya) in taste (rasa), with sweet (madhura), bitter (tikta) and pungent (katu) secondary tastes (anurasas).^[12] Its qualities (gunas) are light (laghu) and dry (ruksha), the post-digestive effect (vipaka) is sweet (madhura), and its energy (virya) is cooling (shita).^[10]

According to Ayurveda, amla is specific to pitta due to its sweet taste and cooling energy.^[12] However, amla is thought to balance vata by virtue of its sour taste, and kapha due to its astringent taste and drying action. It may be used as a rasayana (rejuvenative)] to promote longevity, and traditionally to enhance digestion (dipanapachana), treat constipation (anuloma), reduce fever (jvaraghna), purify the blood (raktaprasadana), reduce cough (kasahara), alleviate asthma (svasahara), strengthen the heart (hrdaya), benefit the eyes (chakshushya), stimulate hair growth (romasanjana), enliven the body (jivaniya), and enhance intellect (medhya).^[12] According to Unani System of Medicine the Mizaj of Amla is Sard Khushk so that it is very good remedy for Haar Amraz[Hot Diseases]

In Ayurvedic polyherbal formulations, Indian gooseberry is a common constituent, and most notably is the primary ingredient in an ancient herbal rasayana called Chyawanprash.^[10] This formula, which contains 43 herbal ingredients as well as clarified butter, sesame oil, sugar cane juice, and honey, was first mentioned in the Charaka Samhita as a premier rasayana or rejuvenative compound.^{[13][14]}

Culinary use

Particularly in South India, the fruit is pickled with salt, oil, and spices. Amla is eaten raw or cooked into various dishes. In Andhra Pradesh tender varieties of *amla* are used to prepare dal (a lentil preparation), also amle ka murabbah a sweet dish indigenous to the northern part of India (where in the berries are soaked in sugar syrup for a long time till they are imparted the sweet flavor) is traditionally consumed after meals.

Religious use

In Hinduism, amla is regarded as a sacred tree attributed to Lakshmi^[3] (<http://webapps.uni-koeln.de/cgi-bin/tamil/recherche>) .^[*citation needed*],



A jar of South Indian *Andhra amla* pickle

Other uses

Popularly used in inks, shampoos and hair oils, the high tannin content of Indian gooseberry fruit serves as a mordant for fixing dyes in fabrics.^[12] Amla shampoos and hair oil are traditionally believed to nourish the hair and scalp and prevent premature grey hair.^[*citation needed*]

Names in other languages

Other names for Indian gooseberry include 'Aamla' in Gujarati, *olay* in Punjabi, *awla* in Marathi, *heikru* in Manipuri, *nelli* (𑌕𑌃𑌔𑌃𑌔𑌃𑌔𑌃) in Sinhala, *nellikka* in Malayalam, *amlakhi* in Assamese, *usirikai* in Telugu, and *nellikkaai* (நெல்லிக்காய்) in Tamil and Kannada, as well as *aonla*, *aola*, *ammalaki*, *dharty*, *aamvala*, *aawallaa*, *emblic*, *Emblic myrobalan*, *Malacca tree*, *nillika*, and *nellikya* in various other languages. In Arabic it is known as *haliilaj* or *ihliilaj*, from which is derived the word *ihliilaji* with the sense 'elliptical', presumably because of the fruit's shape

Gallery



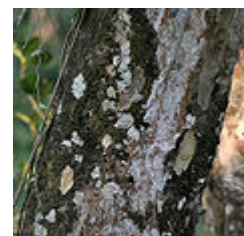
Fruit with young leaves and flower buds.



New leaves.



Flowering twigs.



Tree trunk.

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External links

- Cultivation - from Indian National Medicinal Plants Board (<http://nmpb.nic.in/WriteReadData/links/5426020792amla.pdf>)
- Origin and botanical traits (<http://www.tnsmpb.tn.gov.in/images/amla.pdf>)
- Monograph taken from the textbook "Ayurveda: The Divine Science of Life" (<http://www.toddcaldecott.com/amalaki.html>)

Further reading

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- Puri, Harsharnjit Singh (2002). "Amalaki (*Phyllanthus emblica*)". *Rasayana: Ayurvedic Herbs for Longevity and Rejuvenation*. Traditional Herbal Medicines for Modern Times, Vol. 2. Boca Raton: CRC. pp. 22–42. ISBN 0-415-28489-9.

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