


Morinda citrifolia

<i>Morinda citrifolia</i>	
	
Leaves and fruit	
Scientific classification	
Kingdom:	Plantae
(unranked):	Angiosperms
(unranked):	Eudicots
(unranked):	Asterids
Order:	Gentianales
Family:	Rubiaceae
Genus:	<i>Morinda</i>
Species:	<i>M. citrifolia</i>
Binomial name	
<i>Morinda citrifolia</i> L.	

Morinda citrifolia is a tree in the coffee family, Rubiaceae. Its native range extends through Southeast Asia and Australasia, and the species is now cultivated throughout the tropics and widely naturalised.

English common names include **great morinda**, **Indian mulberry**, **noni**, **beach mulberry**, and **cheese fruit**.

Names in other languages

Vernacular names include *Ayushka*, *Achuka* (Sanskrit), *Pongeephal*, *Ach* (Hindi), *Achu* (Urdu), *Pindre* (Oriya), *Bartundi* (Bengali), *Lorange* (Nicobarese), *Surangi* (Gujarati), *Aseti* (Marathi), *Kakaipalam* (Malayalam), *Tagatemara* (Kannada), *nunaakai* (Tamil Nadu, India), *dog dumpling* (Barbados), *mengkudu* (Indonesia and Malaysia), *apatot* (Philippines), *kumudu* (Bali), *pace* (Java), *ahu* (Sri Lanka) "Duppy Soursop" (Jamaica).

Growing habitats



M. citrifolia flower

M. citrifolia grows in shady forests, as well as on open rocky or sandy shores. It reaches maturity in about 18 months, then yields between 4 and 8 kg (8.8 and 18 lb) of fruit every month throughout the year. It is tolerant of saline soils, drought conditions, and secondary soils. It is therefore found in a wide variety of habitats: volcanic terrains, lava-strewn coasts, and clearings or limestone outcrops, as well as in coralline atolls. It can grow up to 9 m (30 ft) tall, and has large, simple, dark green, shiny and deeply veined leaves.

The plant bears flowers and fruits all year round. The fruit is a multiple fruit that has a pungent odour when ripening, and is hence also known as cheese fruit or even vomit fruit. It is oval in shape and reaches 10–18 centimetres (3.9–7.1 in) size. At first green, the fruit turns yellow then almost white as it ripens. It contains many seeds. It is sometimes called starvation fruit. Despite its strong smell and bitter taste, the fruit is nevertheless eaten as a famine food and, in some Pacific islands, even a staple food, either raw or cooked. Southeast Asians and Australian Aborigines consume the fruit raw with salt or cook it with curry. The seeds are edible when roasted.

M. citrifolia is especially attractive to weaver ants, which make nests from the leaves of the tree. These ants protect the plant from some plant-parasitic insects. The smell of the fruit also attracts fruit bats, which aid in dispersing the seeds. A type of fruit fly, *Drosophila sechellia*, feeds exclusively on these fruits.

Nutrients and phytochemicals



M. citrifolia fruit in Honolulu

M. citrifolia fruit powder contains carbohydrates and dietary fibre in moderate amounts. These macronutrients evidently reside in the fruit pulp, as *M. citrifolia* juice has sparse nutrient content. The main micronutrients of *M. citrifolia* pulp powder include vitamin C, niacin (vitamin B₃), iron and potassium. Vitamin A, calcium and sodium are present in moderate amounts. When *M. citrifolia* juice alone is analyzed and compared to pulp powder, only vitamin C is retained in an amount that is about half the content of a raw navel orange. Sodium levels in *M. citrifolia* juice (about 3% of Dietary Reference Intake, DRI) are high compared to an orange, and potassium content is moderate. The juice is otherwise similar in micronutrient content to a raw orange.

M. citrifolia fruit contains a number of phytochemicals, including lignans, oligo- and polysaccharides, flavonoids, iridoids, fatty acids, scopoletin, catechin, beta-sitosterol, damnacanthal, and alkaloids. Although these substances have been studied for bioactivity, current research is insufficient to conclude anything about their effects on human health. These phytochemicals are not unique to *M. citrifolia*, as they exist in various plants.

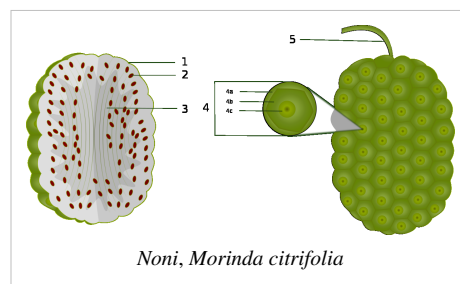
Traditional medicine

The green fruit, leaves, and root/rhizomes were traditionally used in Polynesian cultures to treat menstrual cramps, bowel irregularities, diabetes, liver diseases, and urinary tract infections.

Consumer applications

Morinda bark produces a brownish-purplish dye that may be used for making batik. In Hawaii, yellowish dye is extracted from its roots to dye cloth.

There have been recent applications for the use of *M. citrifolia* seed oil which contains linoleic acid, possibly useful when applied topically to skin, e.g., for anti-inflammation, acne reduction, or moisture retention.



Noni, *Morinda citrifolia*

References

Further reading

- *Noni: The Complete Guide for Consumers and Growers*. Permanent Agriculture Resources. August 2006. p. 112. ISBN 0-9702544-6-6. |coauthors= requires |author= (help)
- Kamiya, Kohei; Tanaka, Yohei; Endang, Hanani; Umar, Mansur; Satake, Toshiko (2004). "Chemical Constituents of *Morinda citrifolia* Fruits Inhibit Copper-Induced Low-Density Lipoprotein Oxidation". *Journal of Agricultural and Food Chemistry* **52** (19): 5843–8. doi: 10.1021/jf040114k (<http://dx.doi.org/10.1021/jf040114k>). PMID 15366830 (<http://www.ncbi.nlm.nih.gov/pubmed/15366830>).

External links

- Crop of the Week: Noni (*Morinda citrifolia*, Rubiaceae) (<http://www.cropsforthefuture.org/crop-of-the-week-archive/noni-morinda-citrifolia-rubiaceae/>)
 - "The Noni Website" (<http://www.ctahr.hawaii.edu/noni/>). 2006. |coauthors= requires |author= (help)
 - Thomas, Chris (August 30, 2002). "Noni No Miracle Cure" (<http://www.cancerpage.com/news/article.asp?id=4799>). Cancerpage.com.
 - Anthony, Mark. "Noni or NIMBY?" (<http://www.foodprocessing.com/articles/2007/018.html>). Foodprocessing.com.
-

Article Sources and Contributors

Morinda citrifolia *Source:* <http://en.wikipedia.org/w/index.php?oldid=586280843> *Contributors:* 2over0, 49John49, AMProSoft, AbsolutDan, AdjustShift, Agusmaks, Al Blotto, Alan Liefing, Alexis649, Andres, Ann Stouter, Anomaly2002, Argo Navis, Astika33, Badseed, Benedictusxvi, Blehfu, Bobo192, CanisRufus, Capanoni, Chowbok, Chris Capoccia, Chris.lipman, ChrisGualtieri, Cjanis7, Chilep, Co2mo, Cometstyles, Dastryaize, Deli nk, Dina, Discospinster, Doc glasgow, DonIncognito, Ecarlos, Eddie200700000, Edward, Elkman, Elroch, Epbr123, Erik9, Eritain, Esha.bhat, Ethel Aardvark, Fastilysock, FayssalF, Fifelfoo, Fredsmith2, GWeditor, Gaius Cornelius, Gdr, Geditor, Geoffrey.landis, Ghw777, Glane23, Gnowor, Gobonobo, GorillaWarfare, GraemeL, Hamamelis, Hasthy, Hayford Peirce, Hesperian, Himmy32, Ibn zareena, IceCreamAntisocial, Jade Knight, Jaguarlaser, Jfdwolff, Jgraytopgun, JimJewett, Jmgarg1, John Vandenberg, Joolwee, Jpatokal, Keckeroo, Kevin, Kevinmon, Kiran Gopi, Knorrepoes, Kolja21, Kumarmano72, Lbvagh, Ligulem, Logigibb, Loniceas, Luna Santin, MKar, MKwek, MPF, Macropneuma, Madmanguruman, Manyats11, Mark Marathon, MarkS, Marshman, Mckaysalisbury, Melstern20009, MercolaOverMerck, Mgiganteus1, Michael Bailes, Miquael, MonteChristof, Mosca, Mpfox2006, MrBill3, Mylitta, N.hong.phuc, Neechalkaran, Neelix, Nekura, Noniacademic, Nonihi, Oileain, One Word Bird, Oxymoron83, Paul144, Perfecto, Pjvpjv, Plantscientist, Pne, PseudoscienceFTL, Purenoni, Quarknimble, RDBrown, Radon210, Ravpapa, Redbaron08, Redecke, Richard B. Frost, Rjwilmsi, Rkitko, Robert Horning, RodC, Ronz, Rover999, SHEKHARTV, Safiel, Salvio giuliano, Sansumaria, Santaduck, Saulj42, Sayerji, Sciencewatcher, Scooterbooter, Scriberius, ShajiA, Shanes, Shannernanner, Shannon.wianecki, Shell Kinney, Simosx, Singhalawap, Slashme, Sminthopsis84, Stemonitis, Stephenb, Strumpan66, Subho007, TDogg310, Tarnjp, Tau'olunga, Tham77, The Thing That Should Not Be, The sock that should not be, TheJJJunk, Tijuana Brass, Tikiwikiriki, TimBentley, Tnicorp, Tom harrison, Travis.Thurston, Tregoweth, Vanjagenije, Vdeck, Vicharam, Wavelength, Weedgarden, WhiteDragon, Wikikava, Wilfredor, Xhienne, Xufanc, Yosri, Zahid Abdassabur, Zefr, Zora, Zre, Zzuuzz, Ό οϊοτρος, 416 anonymous edits

Image Sources, Licenses and Contributors

file:Noni fruit (Morinda citrifolia).jpg *Source:* [http://en.wikipedia.org/w/index.php?title=File:Noni_fruit_\(Morinda_citrifolia\).jpg](http://en.wikipedia.org/w/index.php?title=File:Noni_fruit_(Morinda_citrifolia).jpg) *License:* Creative Commons Zero *Contributors:* Wilfredo Rodríguez

Image:Morinda citrifolia Flower.jpg *Source:* http://en.wikipedia.org/w/index.php?title=File:Morinda_citrifolia_Flower.jpg *License:* Creative Commons Zero *Contributors:* Wilfredo Rodríguez

Image:Morinda citrifolia Fruit.jpg *Source:* http://en.wikipedia.org/w/index.php?title=File:Morinda_citrifolia_Fruit.jpg *License:* Creative Commons Zero *Contributors:* Wilfredo Rodríguez

Image:Noni.svg *Source:* <http://en.wikipedia.org/w/index.php?title=File:Noni.svg> *License:* Creative Commons Attribution-Share Alike *Contributors:* Wilfredor

License

Creative Commons Attribution-Share Alike 3.0
[//creativecommons.org/licenses/by-sa/3.0/](http://creativecommons.org/licenses/by-sa/3.0/)