

You are viewing one of thousands of biographies – click below for more, including Search box and access to Plant associated organisations.

[Plant Biographies](#)

[Bibliography](#)

Myristica fragrans

[Synonyms : *Myristica aromata*, *Myristica aromatica*, *Myristica moschata*, *Myristica officinalis*]

NUTMEG is an evergreen tree. Native to the Molucca Islands, it has very small, fragrant, slightly reddish, dingy pale yellow flowers.

It is also known as (for mace) *Bunga pala* (Malay), *Jaabvatur* (Kashmiri), *Jadhipattiri* (Tamil), *Jaitre* (Oriya), *Jaivitri* (Bengali, Gujarati, Hindi, Marathi), *Jaivatri* (Punjabi), *Japatre* (Kannada), *Japatri* (Telugu), *Jathipathri* (Malayalam), *Jatiphala* (Sanskrit), *Mace*, *Macias* (Spanish), *Macis* (French, Italian), *Miristiko aroma* (Esperanto), *Miristiko odora* (Esperanto), *Muskat* (German), *Nuez moscada* (Spanish), *Poollie* (Tamil), *Wasa-vasi* (Singhalese);

AND (for nutmeg) *Buah pala* (Malay), *Jaiphala* (Bengali, Gujarati, Hindi, Marathi, Punjabi, Urdu), *Jaiphala* (Oriya), *Jajikai* (Telugu), *Jathikal* (Tamil), *Jathikka* (Malayalam), *Jatiphala* (Sanskrit), *Jayikai* (Kannada), *Moscada* (Italian), *Muscade* (French), *Muscat* (Creole), *Muskat* (German), *Muskatnussbaum* (German), *Muskot* (Swedish), *Muskotti* (Finnish), *Myristica*, *Noce moscata* (Italian), *Noix muscade* (French), *Nuez moscada* (Spanish), *Sadhika* (Singhalese), and *Zaaphal* (Kashmiri).

On maturing the small yellowish-brown fruit will split to release the seed inside. The oval and wrinkled, glossy, greyish-brown seed (the nutmeg) is covered in a net-like scarlet membrane (mace) that, when dried, becomes horny, brittle and yellowish-brown or orange. After the tree is 9 years old it will flower for 75 years. The seed has a very strong, penetrating myrrh-like aroma and taste, and the membrane has a similar but milder taste.

The fruit is harvested and the fleshy part of the fruit is removed and the remainder dried. The outer membrane (mace) is separated from the seed kernel (nutmeg), and the freed seed is treated with slaked lime before it is marketed. Blades of mace from Indonesia are orange coloured, while those from the West Indies are yellowish-brown. Small seeds are used for the extraction of distilled oil to yield Oil of nutmeg or Oil of myristica. Seeds are crushed to make crumbly, very fragrant Nutmeg butter. Leaves are distilled too to yield Oil of nutmeg or Oil of mace. Authorities note that ground nutmeg loses its scent and flavour rapidly. Mace is usually retailed in powdered form (about 30-35 nutmegs will yield 1 oz.) as it becomes very hard and would be difficult to grind. Blades of mace are usually used for infusions.

Warning – nutmeg is poisonous and must be used with great caution – and only sprinkled sparingly. Even moderate doses can cause severe headaches, dizziness, nausea, constipation, disorientation, double vision, hallucination, drowsiness, abnormal heart beat, convulsions and death. It should be avoided if maintaining a bland diet.

Fragrans means ‘fragrant’.

Mace and nutmeg have long been familiar to Indians who today prefer the former. It is believed that nutmeg’s hallucinogenic qualities were familiar to ancient Hindus who called it by a name that meant ‘narcotic fruit’. In Egypt today it is sometimes smoked instead of hemp (*Cannabis sativa*), and some authorities claim that prisoners in the West (who have no access to other drugs) use it as a snuff. In India nutmeg is added to snuff or chewed alone

or with betel (*Piper betle*), and it is also claimed that the spice is used as an intoxicant in Indonesia.

It has been long known to Arabs. Avicenna (980-1037), the celebrated Arabian philosopher and physician, referred in his writings to the nutmeg coming from the Moluccas but it seems that this information may not have reached many European ears until about the 14th or 15th Centuries. Ancient Egyptians were also familiar with nutmeg and mace as witnessed by remains found by archaeologists when examining some of the mummies, and through trade with the Arabs mace and nutmeg were familiar to the Turks by the 6th Century as well. But it is thought unlikely that either the ancient Greeks (or earlier Romans) ever came across these spices. The Arabs eventually based their northern nutmeg trade on the port of Acre in the eastern Mediterranean and it was from there that the later Romans imported the spices for many centuries becoming themselves the conduit for the rest of Europe.

Nutmeg and mace had been introduced to Europe from Italy by 1191. That year the Holy Roman Emperor, Henry VI (1165-1197), was crowned in Rome and both the spices were among the aromatics used when the streets were strewn with fumigants. At first initiates tended to follow Arab custom and appreciated nutmeg and mace only for their perfume or their medicinal qualities. It was already recognized that nutmeg can cause hallucinations and a feeling of unreality – if taken in even a moderate dose and this aroused considerable caution. The culprit inducing this has now been isolated as a substance similar to mescaline (found in mescal buttons, *Lophophora williamsii*).

By the 15th Century the western and northern Europeans were beginning to become restless with the Italian/Arabian control of spices and other commodities that were destined to become a part of their way of life and to that extent essential. By that time they knew where their imports came from but needed to find another trade route other than the overland one used by the Arabs. Then the Portuguese navigator, Vasco da Gama (c.1469-1525) rounded South Africa's Cape of Good Hope during his 1497-1498 expedition. The new spice monopolies (described under the entry for clove, *Syzygium aromaticum*, that they also embraced) followed when the Portuguese took control of Ceylon (now Sri Lanka) and the Moluccas (or as also known today Maluku, the group of roughly 1,000 islands in eastern Indonesia referred to as the Spice Islands). But the Portuguese were in due time overthrown by the Dutch who then forbade the export of nutmeg trees and actively deterred any interference to their power. The English eventually wrested control from them (the Dutch) and during the struggle established nutmeg plantations on the Malaysian island of Penang (and then Singapore) where they were to be devastated in 1865 by a fungus disease. As with earlier overlords the English also went to great lengths to protect their monopoly and prevent fruit seeds getting outside their control. However their precautions made no allowance for bird-life. The fruit on the nutmeg trees attracted pigeons. The seeds passed through the birds and many were deposited outside the plantation boundaries – where they flourished not only to the displeasure of the British (who believed for some time that seeds were being stolen) but also the consternation of innocent local people who were aware of the unnecessarily appalling consequences if nutmeg trees were found outside areas of British control. The spice monopolies ceased in the 19th Century.

As already described mace is the dried scarlet membrane that surrounds the seed kernel or nutmeg. There are apparently many stories of ill-informed English administrators working in south-eastern Asia in the past who have ordered that all the nutmeg trees be felled and replaced with 'mace trees'.

During the Middle Ages nutmeg in most of the northern European countries it had penetrated was used primarily as a fumigant against plague. (Both here and in North America

nutmeg poisoning is said to have been commonplace in the Middle Ages – and even into the 19th Century in the United States and England.) But gradually nutmeg fears and associations were lulled and its use as a condiment slowly emerged until it reached the stage that everything received a flurry of nutmeg – so much so that some people carried a nutmeg with them wherever they went, together with the necessary small pocket grater. This latter practice is said to have peaked in France at the end of the 17th Century but in England it persisted well into the 19th Century.

Both mace and nutmeg are still used in Europe today. They are less common in Middle Eastern and North African cuisine – and Eastern use has leaned far more towards medicinal needs than the European stress on culinary flavouring qualities. In India nutmeg has never apparently been used alone. It tends to be chewed there with other substances such as betel (*Piper betle*). In Malaysia nutmeg (which contains pectin) is used to candy half-ripe fruit. In Africa, Hindu shopkeepers sell herbal chewing mixtures featuring nutmeg as a prime ingredient. In Kenya particularly this is known as *Paan* and different strengths are made for men and for women. Despite the extremely unpleasant after-effects, authorities say it is not unusual (as alluded to earlier) for some prisoners in the Caribbean to inhale the fumes of heated powdered nutmeg.

In literature the English poet, Geoffrey Chaucer (c.1345-1400) refers to nutmeg in *The Canterbury Tales* when Sir Thopas says

Notemygge to put in ale
Whether it be moist or stale,
Or for to lay in cofre.

Two hundred years later both mace and nutmeg are mentioned in the plays of the famous English dramatist, William Shakespeare (1564-1616). They both make an appearance in *The Winter's Tale* when the Clown is listing ingredients for the sheep-shearing feast

.....I must have saffron, to colour the warden pies; maces, - dates,
- none: that's out of my note; "nutmegs, seven: a race or two of
ginger:"

Various English customs and superstitions are associated with nutmeg. Nutmegs were placed among the hot embers of a fire and used to tell the faithfulness of a loved one, they were carried upon one's person to protect against aches and pains, and they were given to the bride as she left the church as a token of fruitfulness. There were also those who considered powdered nutmeg to be generally lucky.

All attention so far has been directed towards the spices but the dried fruit flesh is eaten locally (particularly on the Indonesian island of Sulawesi) and provides either a snack or a dish to complete a meal.

Today nutmeg or mace is used as a flavouring and/or scenting agent by the cosmetics, perfumery and toiletry industries (particularly in toothpaste for the latter and hair lotions). The tobacco industry uses them as a flavouring, especially in cigarettes. They provide a commercial flavouring or aroma too for the food and drinks industries (the latter notably in beer). Not least in this summary mace and nutmeg are also used in some liniments by the pharmaceutical companies.

Medicinally, herbalists have recommended nutmeg or mace (they have identical medicinal properties) for aiding digestion. They have also been used in treating malaria, early stages of leprosy, rheumatism, fevers and dysentery, as well as allaying nausea and vomiting. Today nutmeg is preferred to mace and can be used in the treatment of diarrhoea, wind, nausea, vomiting and indigestion – and its essential oil has been applied externally to ease rheumatism.