

### *Mangifera indica*

[Synonyms : *Mangifera austro-yunnanensis*, *Rhus laurina*]

**MANGO** (Creole, English, Finnish, German, Italian, Spanish, Swedish, Filipino/Tagalog) is an evergreen tree. Probably native to India, Vietnam and Malaysia, it has many many tiny yellow-striped, greenish-yellow to pink flowers that can have a strong unappealing smell. It is also known as *Amba* (Marathi, Singhalese), *Amchur* (Hindi, Punjabi, Urdu), *Amra* (Sanskrit), *Amram* (Malayalam), *Amramu* (Telugu), *Anbah* (Arabic), *Arbre de mango* (French), *Kachukacha aom* (Bengali), *Kancha ambu* (Oriya), *Keri* (Gujarati), Laurel sumac, Laurel sumach, *Mamidi kayi* (Telugu), *Ma-muang* (Thai), *Manga* (Malayalam), *Mangai* (Tamil), *Mangarbo* (Esperanto), *Mangga* (Malay), *Mangifera commune* (Italian), *Mangifero Hindia* (Esperanto), *Mangobaum* (German), *Mangotræ* (Danish), *Mangro* (Sierra Leonean), *Mangu ag* (Turkish), *Mangue* (French), *Mangueiro* (Portuguese), *Manguier* (French), *Mangujo* (Esperanto), *Manja* (Dutch), *Mano* (Twi), *Mavina kayi* (Kannada), *Mon go* (Chinese), *Mwiembe* (Kikuyu), Peach of the Tropics, *Pelem* (Javanese), and *Xoài* (Vietnamese).

The flower clusters can have 1,000-6,000 tiny flowers in them. The mottled greenish-yellow, red or violet fruit (usually with a pronounced beak) can weigh from 6 oz. to 2 lb. or more. The wood is susceptible to wood-boring insects.

The flowers are pollinated by flies and hover-flies.

Warning – all parts except the flesh of the ripe fruit are believed to be poisonous. The fruit stalk contains poisonous juices (similar to those of poison ivy, *Rhus radicans*) that can fall on the fruit when it is picked. Thus it is always desirable to wash or wipe the fruit with a clean, disposable cloth (the poisons do not evaporate) before handling it extensively or eating it. An allergic reaction can sometimes be experienced to the flowers or the fruit skin. Smoke from burning wood or foliage can cause dermatitis. The leaves can be poisonous for some animals if eaten continuously and can lead to kidney failure and death.

There are several species, in addition to several groups or varieties that stem from *Mangifera indica* some of which have a lemonish, bananarish, or minty taste. In the *Mulgoba* Group the *Mulgoba* (which is said to have an excellent flavour) is one of the original Indian varieties but it has only a moderate yield, whereas the *Hayden* is understood to be the preferred variety mainly grown and exported today. It is the *Alphonse* Group however that includes the sweet small *Alfonso* mango that is believed by many Indians to be the best with an exquisite scent.

*Indica* means ‘of or from India (or from the East Indies or from the Far East’.

As much as any other tree the mango has insinuated itself into the culture and tradition of the Indian Continent. The blossom is eulogised in much poetry including that of Kalidása (around 400 AD) who is hailed as one of India’s greatest dramatists. It is also depicted in art, sculpture and architecture. The leaves for Hindus are symbols of happiness and prosperity, and in the Indian villages they believe that fresh leaves emerge on the tree when a son is born. They are used during Hindu festivals and are hung from string over the doorways of houses where a marriage ceremony is taking place or where a son is born.

Authorities note that the mango has been cultivated locally for over 4,000 years. It is believed to have spread from India and Burma (now referred to as Myanmar) to the Far East and Malaysia around 500 BC. Four years before the death of Alexander the Great (356-323 BC) the king of Macedonia, in Babylon while he was still campaigning in India, his men are said to have come across mango trees growing in the Indus valley (now part of Pakistan). In ancient Greece and in Rome however the fruit's existence was unknown. Travellers over 15 centuries later in 1673 and 1727 eulogised on the mango's taste and reported that it excelled beyond other known fruit. Christened by many as the 'king of fruits' it has also been called the 'apple of the tropics'.

Although some authorities think that the Arabs introduced mango to East Africa in about 450 BC others believe that Persian traders first planted mangoes in Africa in about 1000 AD. China was introduced to the mango from Malaysia via Persia (now Iran) and they were certainly being cultivated in Persia by at least the 10<sup>th</sup> Century. But the Americas had their first taste of the fruit only after the Portuguese traders carried the fruit there from West Africa in the 16<sup>th</sup> Century.

In 1700 the trees were planted in Brazil. Forty years later they were also in the West Indies and incidentally tropical Australasia. Mango trees were first seen in southern Florida in 1825 – the only area in North America where they will flourish. (So it cannot have been before then that the fruit became sufficiently familiar to some North American Indian tribes that records can show that the Seminole Indians in the Florida region ate them.) It was not until 1889 however when the United States Department of Agriculture enhanced some grafted varieties that the American groves in Florida achieved commercial success.

Some historians claim that by the 10<sup>th</sup> Century the trees had become an established status symbol in India and mango orchards could only be cultivated there by the nobility. Apparently the Mughul emperor, Akbar the Great (1542-1605) is said to have planted a massive orchard in the state of Bihar in northern India which was known as *Lakh Bagh* – *lakh* means 100,000, an indication of the rumoured number of trees.

Although the fruit flesh of some varieties is not considered remarkable it is understood that the mango juice has long received far greater regard in India. That obtained from unripe fruit can be made into a cooling drink with milk and sugar, and juice extracts provide other soft drinks as well. Throughout Asia there is a general belief that the mango enhances the appetite but until the 19<sup>th</sup> Century, with the exception of pickles and chutneys, the mango was rarely used as an ingredient in the West other than in Indian dishes. In Asia excess fruit have been used to make vinegar and, when unripe, have been used for preserves. The flowers, which are said to yield a particularly thick and sweet honey, are eaten in quantity in Thailand. In India the seeds have been resorted to as a famine food.

Leaves have sometimes provided cattle fodder in parts of Asia during a food shortage. As mentioned above however they are lethal for animals if eaten continuously. The old leaves especially contain a poison that while the kidneys attempt to eliminate it from the body turns the urine yellow. At one time in India animals were purposely fed the leaves and the urine was collected for use commercially as a dye (known as *peori* or Indian yellow) until it was banned by law when its inhumane production was appreciated. It was used to paint wood yellow (and imparted an unpleasant smell to any material dyed with it).

Mango bark, which contains tannin, also yields a yellow dye.

The hard black-streaked, brown wood has been used for boat-building, manufacturing plywood and making doors, window frames and packing cases. In northern India it has also been used to make local percussion instruments.

Locally in Mexico the leaves have been used to harden gums and clean teeth.

Medicinally, the latex from the trunk has been employed in Africa in the treatment of syphilis, and the seeds have been used for intestinal worms. Three leaves have been used in infusion as a remedy for influenza, leaves have also been used to treat diarrhoea, dysentery, toothache and oral soreness, and young bark has provided a remedy for piles. In India, China and Malaysia the seeds have been used in treatments for asthma, the bark has been recommended for diarrhoea and other disorders, the leaves have been used to treat scorpion bites and the ripe fruit have been used as a laxative and in the treatment of various ailments.