

### *Morus alba*

[Synonyms : *Morus alba* var. *alba*, *Morus alba* var. *atropurpurea*, *Morus alba* var. *bungeana*, *Morus alba* var. *latifolia*, *Morus alba* var. *multicaulis*, *Morus alba* var. *tatarica*, *Morus atropurpurea*, *Morus bombycis*, *Morus chinensis*, *Morus intermedia*, *Morus indica*, *Morus japonica*, *Morus kagayamae*, *Morus latifolia*, *Morus macrophylla*, *Morus mongolica*, *Morus morettiana*, *Morus multicaulis*, *Morus nervosa*, *Morus tatarica*]

**WHITE MULBERRY** is a deciduous shrub or tree. Native to central and eastern China, it has greenish catkin-like spikes.

It is also known as *Amingit* (Tagalog), *Amora da amoreira* (Portuguese), *Amoras* (Tagalog), *Amoreira* (Portuguese), *Amoreira branca* (Portuguese), *Aspri moria* (Greek), *Aspromuria* (Greek), *Bai sang* (Chinese), *Bebesaran* (Indonesian, Malay), *Bebesaran lampung* (Indonesian, Javanese, Malay), *Besaram* (Malay), *Black fruited mulberry*, *Cawqli bajda* (Maltese), *Chernitsia biala* (Bulgarian), *Chinese mulberry*, *Chinese white mulberry*, *Common mulberry*, *Dâu tằm* (Vietnamese), *El ttuut* (Arabic), *Fruitless white mulberry*, *Gelso* (Italian), *Gelso bianco* (Italian), *Gelso comune* (Italian), *Guwa* (Japanese), *Indian mulberry*, *Kambli chedi* (Tamil), *Kara guwa* (Japanese), *Kara yama guwa* (Japanese), *Kimbu* (Nepalese), *Ma guwa* (Japanese), *Maulbeerbaum* (German), *Maulbeere* (German), *Mempaung* (Indonesian), *Mforsadi* (Swahili), *Mfurusadi* (Swahili), *Moerbe* (Dutch), *Moerbezie* (Dutch), *Mon* (Thai), *Mora* (Spanish), *Mora blanca* (Spanish), *Mora de árbol* (Spanish), *Mora di gelso* (Italian), *Moral* (Spanish), *Moral blanco* (Italian), *Morbar* (Danish), *Morera* (Spanish), *Morera blanca* (Spanish), *Morera blanco* (Italian), *Moro* (Italian), *Moro bianco* (Italian), *Moro da carta* (Italian), *Morus* (Italian), *Moruša biela* (Slovak), *Moruso blanka* (Esperanto), *Morušovnik bílý* (Czech), *Morwa biala* (Polish), *Mulberry*, *Mulberry bush*, *Mulberry tree*, *Murbei* (Indonesian, Malay), *Mûre de murier* (French), *Mûrier* (French), *Mûrier blanc* (French), *Mussuketi* (Tamil), *Musukette* (Tamil), *Pattupuchi* (Tamil), *Posa* (Burmese), *Ppong* (Korean), *Ppong na mu* (Korean), *Russian mulberry*, *Sang* (Chinese), *Sang shu* (Chinese), *Shahtut* (Hindi), *Shelkovitsa belaia* (Russian), *Shetun* (Gujarati), *Silkworm mulberry*, *Silkworm tree*, *Sillkiäispuu* (Finnish), *Toot* (Persian, Urdu), *Tukhi* (Arabic), *Tula* (Sanskrit), *Tut* (Bengali, Hindi, Malay, Punjabi), *Tut belyi* (Russian), *Tuth* (Arabic), *Valkomulperi* (Finnish), *Vit mullbär* (Swedish), *Vitmullbärsträd* (Swedish), *Weisse Maulbeere* (German), *Weisser Maulbeerbaum* (German), *White fruited mulberry*, and *White morus*; and in flower language is said to be a symbol of wisdom.

The bark can be processed to yield fibres for weaving.

White mulberry and mulberry *Morus nigra* can be confused. White mulberry has smoother leaves and short stalked fruit.

*Alba* means ‘white’ with reference to the colour of the fruit.

In China it used to be common to see the white mulberry growing around villages because it was able to offer so much to the community.

The bark has been used in China from the earliest of times to make paper, and bark fibre has also been employed in manufacturing textiles.

Leaves of this species, which can be fed to cattle, are used predominantly as food for silkworms. This and other closely related species of mulberry native only to China were

used primarily for this purpose. The larva takes 3-5 days to spin its silk cocoon in a series of figure-of-eight loops, making a single thread (some authorities have pointed out that one cocoon can yield a thread as much as 1¼ miles in length) – and then it changes into a pupa. If the adult pupa is allowed to emerge from its cocoon as a moth it would not only pierce the single thread but would also secrete a liquid that would soften this filament. Therefore most pupae are not permitted to emerge and are killed by heating or steaming the cocoons. For the Buddhist religion destruction of any life is an offence. This has meant that although Thailand has experienced a revival of the silk industry attempts to introduce it in Sri Lanka have been unsuccessful.

Silk, as a material, was familiar in a large part of the Orient long before the spread of the silk-making art there – and on some old trade routes it was the only commodity transported. As authorities point out it was extremely light and easy to carry. One such silk route ran all the way south from the south-western Chinese province of Yunnan to the southern tip of Burma (or as it is now known, Myanmar). The silk-making art itself spread through a large part of the Orient almost by osmosis. Authorities believe that knowledge of it gradually seeped south from China as cultivation of the species of mulberry spread through the peninsular on the south-east Asian mainland (still sometimes referred to as Indo-China) – and that in due time the Indians carried it further still when they invaded such countries as Java (now part of Indonesia). In contrast its arrival in Japan in the 3<sup>rd</sup> Century was far more abrupt. The Japanese captured silkworm breeders from Korea who had fled there for sanctuary from persecution by the Chinese.

In some areas in south-eastern Asia white mulberry leaves have provided a vegetable, particularly for nursing mothers. The fruit can be eaten stewed, and can also be made into liqueur. Even today in some regions such as Afghanistan and Syria these insipid-tasting fruit are sun-dried and ground for bread flour.

The roots yield a yellow dye.

When in North America it was found that their native red mulberry was an unsatisfactory alternative to the white mulberry for breeding silkworms, the white mulberry was introduced to that Continent in the 19<sup>th</sup> Century with this end in view. Some authorities believe it made its appearance there even earlier, in the 17<sup>th</sup> Century, and that initially its cultivation was actively encouraged by Britain. There are some claims that the silk of the coronation robes of Charles II (1630-1685) came from North American silk farms. In either case despite various attempts following the arrival of the white mulberry, silk farms were unsuccessful on that Continent due at that time to climate and labour costs. A paucity of records suggests that it is unlikely that many North American Indian tribes came to be familiar with white mulberry apart from the Cherokee. Where they were concerned however, in addition to eating the blackberry-like, reddish-pink or black fruit, they appear to have absorbed the plant into their medicinal repertoire. Not only did they take a bark infusion as a laxative but they also used it to treat dysentery and worms.

The hard and durable, moderately heavy, yellowish-brown wood has been used for making sports equipment and furniture. During the 2nd World War it was also fashioned into crutches.

Medicinally, the fruit has been used in India to treat indigestion and sore throats. In North America it has been used to treat diarrhoea. Cubes of the wood (and also the root, the stems, twigs, leaves and fruit) have long been used in Chinese medicine. In parts of south-eastern Asia the leaves have been used in remedies for some venereal diseases.