

Morus nigra

MULBERRY is a deciduous shrub or tree. Native to western Asia (particularly Nepal), the southern Caucasus and Iran, it has yellowish-green catkins.

It is also known as *Amoreira negra* (Portuguese), Black fruited mulberry, Black morus, Black mulberry, *Chernitsia cherna* (Bulgarian), Common mulberry, English mulberry, European mulberry, *Hei sang* (Chinese), *Kui guo* (Chinese), *Kuro guwa* (Japanese), *Kuro mi guwa* (Japanese), *Maulbeerbaum* (German), *Mavri moria* (Greek), *Mora de árbol* (Spanish), *Mora negra* (Spanish), *Moral* (Spanish), *Moral de Los Robles* (Spanish), *Moral negro* (Spanish), *Moreas* (Spanish), *Morera negra* (Spanish), *Moro* (Italian), *Moro nero* (Italian), *Moruša čierna* (Slovak), *Moruso nigra* (Esperanto), *Morušovnik černý* (Czech), *Mûre* (French), *Mûrier* (French), *Mûrier noir* (French), Persian mulberry, Purple mulberry, *Schwarzer Maulbeerbaum* (German), *Shelkovitsa chernaia* (Russian), Silworm mulberry, *Svart mullbär* (Swedish), *Svartmullbärsträd* (Swedish), *Tuta* (Maltese), and *Zwarte moerbe* (Dutch); and in flower language is said to be a symbol of ‘I shall not survive you’, ‘kindness offset by sharpness and wisdom’, and sadness.

Mulberry and white mulberry *Morus alba* can be confused. Mulberry has rougher leaves and long stalked fruit.

Nigra means ‘black’ with reference to the fruit.

As with quite a few common plant names this one is not free from confusion. Apparently the name Mulberry (and its classical equivalent) has been applied in the past to other plants since at least the time of the celebrated Roman poets Horace (65-8 BC), Virgil (70-19 BC) and Ovid (43 BC-17 AD). In more recent times in England (and the United States) the name has been used for gooseberry *Ribes uva-crispa*, holly *Ilex aquifolium*, ivy *Hedera helix* and blackberry *Rubus fruticosus*. Thus references to mulberry in older records and widely accepted traditional material (such as nursery rhymes) cannot always be taken at face value.

The symbolic ‘tree of life’ (the *fu-sang* tree of the Han Dynasty which lasted from 202 BC to 220 AD) is related for some scholars to the mulberry. This is hardly surprising in view of the economic importance of the silk industry to the early Chinese civilization, and for hundreds of years that the Chinese made paper from mulberry bark (long before Arabs or Europeans ever conceived the possibility of such an art).

Since about 2700 BC the mulberry (particularly the white mulberry, *Morus alba*) has been cultivated by the Chinese for silk production. Even today the material is known there as *Si* in honour of the empress Si Ling-Shi (c. 2600 BC).

Chinese legend tells how Si Ling-Shi was fascinated by the silkworms spinning their cocoons on a mulberry tree in her garden. By accident she dropped a cocoon in her tea and as it softened she was able to unwind its threads. In order to fulfil her desire for a gown made from this gossamer strand, she persuaded her husband to give her a grove of mulberry trees. After several years and many, many hours’ work she had unwound sufficient thread to weave enough material. Another relatively younger, unattributed legend suggests that the mulberry’s fruit turned red only after the lovers *Pyramus* and *Thisbe* (who were the ‘models’ for Shakespeare’s (1564-1616) *Romeo and Juliet*) bled to death under a white-berried mulberry tree.

The art of making silk only inched its way outside China in about 700 BC when it spread to the Babylonians – and in due time the ancient Greeks and the Romans, all of whom usually fed the silkworms on the leaves of the black mulberry. For centuries China (and then Babylon as well) had a lucrative export trade in their rare silk.

The ancient Egyptians were familiar with the mulberry and the Roman natural historian, Pliny writing in the 1st Century, describes how they used the tree.

Theophrastus, the Greek philosopher who lived from about 372-287 BC, wrote of the Greeks' use of the wood as fire sticks. There is a story that centuries later the southernmost area of Greece was christened the Morea (the Greek for 'mulberry' is *moron*) by one of the last rulers of Constantinople because of the resemblance of its shape to that of a mulberry leaf.

For Christians the Gospel according to St. Luke in the *Bible* describes how in today's vernacular 'faith can move mountains'. In this instance the mulberry (referred to as the 'sycamine tree') can uproot itself on command and plant itself in the sea.

The Romans dedicated the mulberry, which by the last century BC seems to have been prolific in Italy, to the goddess of wisdom, Minerva. (At that time the silk was believed to come from the leaves not from the silkworms which fed on them) They depicted it on buildings (as witnessed by archaeologists when they excavated at Pompeii), ate the fruit at their feasts, used the tree for medicinal purposes - and imported the silk. They appear to have well appreciated the voluptuous nature of silken material as during the beginning of the 1st Century Emperor Tiberius prohibited its use for men's clothing. Apparently he believed that such use indicated a sign of effeminacy. Sericulture (silkworm breeding) only reached Italy in the 6th Century when it was introduced there from Constantinople by Justinian (c.482-565), emperor of the East Roman Empire. The Romans used this species until about 1434 when the white mulberry *Morus alba* introduced from the Levant superseded it.

The mulberry tree itself moved west faster than the silk-making art. The trees are said to have reached Britain during the Roman occupation (51 BC-407 AD). Some authorities suggest that it was a common tree in England by Anglo-Saxon times as the Anglo-Saxons used to make a drink from honey and mulberries called *morat*. It was not until the 11th Century however that the secret of silk-making arrived in southern Spain (despite the fact that mulberry trees had been grown there since at least the middle of the previous century). By the 14th Century the process was well established in Italy (especially around Florence and Venice), and the following Century it was similarly familiar in France.

William Turner, who lived from about 1510-1568 and has been dubbed the 'father of British botany', is said to have planted the mulberry tree that came from Persia (now Iran) in the grounds of Syon House, in Brentford in southern England in 1548. During the 16th Century silk must have made an impact among the aristocracy in England as in other European courts. In the earlier part of the Century Henry VIII (1491-1547) wore the first pair of silk stockings seen in the Country, and in the latter half his daughter, Elizabeth I (1596-1662), personally encouraged the tree's commercial cultivation. They were grown at Rye on the south coast. Her successor, James VI of Scotland and I of England (1566-1625) carried this one stage further by importing 100,000 black mulberry trees from France with a view to establishing a silk industry in the Country. He had already planted 4 acres of black mulberries at Buckingham Palace in London and now directed that each of the Lords-Lieutenant arrange for parcels of 10,000 of his latest acquisition (which they had to buy at a subsidized price) be planted in their respective Counties throughout the Country. Some material was actually made from the home-grown silk and James I's wife, Anne of Denmark (1574-1619) who had lavish tastes, is understood to have sported a dress prepared from it. However problems with feeding the silkworms and opposition

from the silk merchants (who envisaged their trade disappearing like a puff of smoke) combined to halt this initiative.

It was from the 15th Century that the white mulberry *Morus alba* started to make inroads into the black mulberry's popularity (despite the latter being the hardier tree) – not just as food for silkworms but also for the fruit and root bark (the former primarily for food and drink, and the latter for medicines).

At the beginning of the 17th Century the Dutch also made an unsuccessful attempt to establish a silk industry at home when they brought silkworms back from Java. (Eventually though they had to resort to a much simpler option of weaving raw silk imported from their East Indian colonies.)

Today the mulberry tree is rare in Britain and other parts of Europe and the small raspberry-like, purplish red fruit tend only to be used for home cooking. There was one silk farm left in England in the early 1980s where 3-4 million silkworms had been reared annually - and it was there in 1981 that thousands of silkworms spun 180 metres of thread for the Princess (Diana) of Wales' wedding dress. Since then fashions have changed. Once it was realised that the silkworms were killed to prevent them eating through the cocoon's single thread there was an outcry of dismay. The fashion houses directed their searches towards finding a silk thread source involving a different process. This has led to the discovery, in India particularly, of several other moth species and different processes which yield a far shorter thread but do not depend upon the traditional cocoon boiling process. These new silks seem to have attracted an overall name or term, 'peace silk'. The quality of these peace silks vary according to the insect species and the processing methods used and all of them are more expensive than traditional silk.

The mulberry has been much celebrated in literature. It features in one of the well-known nursery rhymes

Here we go round the mulberry bush, the mulberry bush, the
mulberry bush, ...

Authorities debate the origin of this. Some have suggested that it came from prisoners' exercise when they circled a prison yard, while others allege a connection with the murder of Thomas à Becket (1118-1170). Traditionally his murderers are supposed to have hung their swords on a mulberry tree. In 16th Century England the fruit attracted the attention of the poet, Edmund Spenser (c.1552-1599), and his famous peer, William Shakespeare (1564-1616) too. The former wrote

With love juice stained the mulberie,
The fruit that dewes the poet's braine.

In Shakespeare's works it appears in several plays including *Coriolanus*.

.....waving thy head,
Which often, thus, correcting thy stout heart,
Now humble as the ripest mulberry
That will not hold the handling;

and in the poem *Venus and Adonis*.

When he was by, the birds such pleasure took,
That some would sing, some other in their bills
Would bring him mulberries, and ripe-red cherries;
He fed them with his sight, they him with berries.

In the theatre world the mulberry tree holds special meaning as Shakespeare planted one in 1609 at New Place, Stratford-upon-Avon. It is said that he took it from the Mulberry Garden planted by James I (1566-1625) now sited within the private grounds of Buckingham Palace. After his death both his house and the tree were visited by Shakespeare's admirers. Then in about 1752 a Reverend Mr. Gastrell bought the property and it is said he pulled down the house and felled the tree to deter Shakespeare's

persistent fans. The mulberry's wood was used to make snuff-boxes and other mementos and many were inscribed 'Memento Mori' (punning the associations with the mulberry and with Shakespeare's death). In 1769 the actor, manager and dramatist, David Garrick (1717-1779), was given the Freedom of Stratford-upon-Avon. The box containing the key presented to him was made from the wood of this tree (the one that had grown at New Place). And during the celebrations that took place (it is believed, they were held not least to commemorate Shakespeare's birth just over 200 years earlier), Garrick held a cup that had also been fashioned from mulberry wood and recited verses he had written in honour of the tree. From a cutting of the celebrated tree Garrick grew another in his garden at Hampton Court and from this a descendant now grows in Shakespeare's garden at Stratford. The mulberry tree was also celebrated in *The Task*, the long poem written by the English poet, William Cowper (1731-1800).

The mulberry tree was hung with blooming wreaths;
The mulberry tree stood centre of the dance;
The mulberry tree was hymn'd with dulcet strains;
And from his touchwood trunk the mulberry tree
Supplied such relics as devotion holds
Still sacred, and preserves with pious care.

In Britain even at the beginning of the 20th Century, there were those who believed that the mulberry must be planted with a quince *Cydonia oblonga* as the latter balanced the former's sullen influences which could bring misfortune to the household. The pair had to be positioned with the quince to the north and the mulberry to the south of the house. German children were dissuaded from eating the fruit by being told that they were used to black the Devil's boots.

Although it might seem to some that the mulberry was prized for sericulture to the virtual exclusion of any of its other attributes, as already indicated the fruit have always been used in cookery. Although their popularity has waxed and waned over the centuries in medieval Europe, when food was particularly colourful, chefs used the fruit to provide a blue colouring.

Mulberry was introduced to North America and some of the Delaware Indian tribe used the bark not only for treating liver disorders but also to cause vomiting and act as a purgative. Today the bark fibre is used for weaving on a commercial scale, the fruit are an ingredient used by the cosmetics industry eg. in rouge, the wood is used for inlaying and making furniture and items such as snuff-boxes, and researchers are investigating whether the extract from the roots under consideration for medicinal use may also have some role to play in the control of insect pests.

Medicinally, herbalists used mulberry leaves to treat burns and piles, and to stem bleeding. The juice from the leaves was believed to be an antidote for monk's hood *Aconitum napellus* poisoning and snake bites – and the juice from the fruit was used to treat throat infections and toothache. The bark offered a treatment for worms. Today the fruit can be taken as a mild laxative, and used as medicinal colouring and flavouring – and the leaves are used in homoeopathy. At the turn of the 20th and 21st Centuries it also seems that Western scientists have obtained an extract from the roots that might contribute to a significant advance not only in the treatment of diabetes but also of cancer, and HIV.

It is the birthday flower for 19th June.