

### *Nelumbo nucifera*

[Synonyms : *Nelumbium nelumbo*, *Nelumbium nuciferum*, *Nelumbium speciosum*, *Nelumbo caspica*, *Nelumbo komarovii*, *Nelumbo nelumbo*, *Nelumbo speciosa*, *Nymphaea indica major*, *Nymphaea nelumbo*]

**LOTUS** (English, French) is a deciduous aquatic perennial. Native from southern Asia (particularly China, India and Tibet) to Australia it has large fragrant, bright pink (occasionally white and rarely yellow) flowers with yellow stamens.

It is also known as Arrowroot, *Agyptischebohne* (German), *Baíno* (Filipino/Tagalog), *Bua luang* (Thai), *Bunga padam* (Malay), *Burrshaluk* (Indian), Chinese arrowroot, Chinese water lily, East Indian lotus, Egyptian bean, Egyptian lotus, *Fava d'Egitto* (Italian), *Fukii* (Chinese), *Fuli masri* (Turkish), *Giglio del Nilo* (Italian), *Hasu* (Japanese), *Heilige Lotusblume* (German), Hindoo lotus, *Ho hua* (Chinese), *Ho lien-hua* (Chinese), Indian lotus, *Indische Lotosblume* (German), *Indischer Lotus* (German), *Kamal* (Gujarati, Marathi), *Kamala* (Sanskrit), *Kanbal-kukri* (Indian), *Kan tan* (Chinese), *Kanwal* (Hindi), *Kanwalkakri* (Punjabi), *Kombol* (Bengali), *Lin* (Chinese), *Loi-podoma* (Indian), *Lootus* (Finnish), *Loto* (Italian), *Loto sacro* (Italian), *Lotos indický* (Czech, Slovak), *Lotos ořechonosný* (Czech), *Lotusblume* (German), *Lotus du Nile* (French), Lotus lily, *Lotus sacré* (French), *Nélombo* (French), *Nelumbo*, *Nelumbo nuksa* (Esperanto), *Nelun* (Singhalese), *Nillilie* (German), *Nilofer* (Persian), *Nilufar* (Arabic), *Ninfea d'Egitto* (Italian), Pink waterlily, Pond nut, Pythagorean bean, Sacred bean, Sacred Indian lotus, Sacred lotus, *Seroja* (Malay), *Tamara* (Malayalam, Telugu), *Tamarai* (Tamil), *Telipok* (Malay), *Tenatai* (Malay), and Water bean; and in flower language is said to be a symbol of eloquence, estranged love (flower), and recantation (leaf).

*Nucifera* is derived from Latin *nucleus* (nut) and *-fer* (bearing, carrying) components meaning 'bearing nuts'.

The plant has been cultivated in many countries as an ornament and has been a familiar sight in the East near palaces and temples for over 2,000 years. Some authorities believe that it was fashionable during the Ptolemaic Dynasty (323-30 BC) in Egypt to take a boating picnic among the lotus beds – as much as it was to be seen standing proud of the water in Japanese ponds in Tokyo in the early 20<sup>th</sup> Century. According to food authorities it must also have been familiar to the Romans as its likeness can be seen in Pompeii in a mosaic in the 'House of the Faun'.

Of all the water lilies the Asian lotus (a name applied to several species) has probably been singled out the most for symbolism and as a religious plant (especially in the Orient and the Near East).

In about 526 BC at the time of the Persian invasion of Egypt the lotus was introduced to that Country. Herodotus (c.485-425 BC), the Greek historian, described the lotus flowering in a profusion of blooms on the Nile in flood and the uses to which the Egyptians put it. But it cannot be seen growing untamed in the Nile today

For the Egyptians the lotus represented the rich fertile soil of the Nile basin upon which the civilization's prosperity was dependent and symbolized immortality. Statues of Osiris (the god of vegetation and regeneration) often bore lotus blossoms while his son, Horus

(god of light and the sun) would be depicted sitting on a lotus blossom. The lotus was also recognized in Persia (now Iran) where it symbolized the sun and light.

In India many spiritual ideas are associated with the lotus flower, and it is the lotus from which the Asian motif is derived. The lotus is sacred in India, Tibet, Sri Lanka, China, Japan, Thailand and Burma (now Myanmar). The flowers are dedicated both to Brahma, creator of the universe for Hindus, and to Buddha, 'the enlightened' for Buddhists. The Hindus believe that Brahma emerged from a lotus blossom and is shown, pictorially, sitting upon one – and yoga, which many in the West particularly are unaware is a system of Hindu philosophy, uses a thousand-petalled lotus flower to represent spiritual ecstasy or *samadhi*. The Indian Hindus also turn to the lotus as a way of describing their homeland in that the petals signify central India and the leaves represent the surrounding provinces. For Indian Buddhists on the other hand the lotus flower is believed to have sprung up to proclaim Buddha's birth.

Chinese Buddhism not only claims that the lotus is the footprint of Buddha but it also depicts a sacred lake of lotuses in their idea of heaven.

The lotus flower features in the design of the Order of the Star of India (the lotus and the rose (*Rosa*) of England with two crossed palm branches).

Seeds (known as Lotus nuts) will survive dormant in river-mud for hundreds of years. In 1947 the British Museum had a surprise. Some seeds held in dry storage in its Hans Sloane Collection sprouted after 237 years. Other seeds that were reputedly about 1000 years old and had been found in peat bogs in Manchuria by I. Ohga (a Japanese botanist noted for his studies of fossilized plants) were brought to Tokyo and examined by experts. They were re-planted in 1924 and two of them were eventually subjected to radioactive carbon-14 dating in Washington, D.C. in the United States. From these tests it was confirmed that they were about 1,000 years old.

The seeds are used in Vietnam, as well as China and Japan, to make a sweet soup. While in China and Java (now part of Indonesia) the leaves are stuffed for traditional dishes (the former usually involves a meat filling and the latter a fish one). The Chinese also pickle the seeds in vinegar or preserve them in syrup, and the underground stems are a source of the Chinese arrowroot.

Apparently Prussian-born, Australian explorer/naturalist, Ludwig Leichhardt (1813-c.1848) used Lotus nuts to make a coffee, and is said to have declared them a 'most excellent' alternative. In the south-eastern peninsular of the Asian mainland (still sometimes referred to as Indo-China) lotus stamens have been used to flavour tea. The seeds, boiled or roasted, and the young underground stems have also provided food – and stems, leaves, flowers and young fruit can be eaten raw or cooked as well.

Flower buds are picked for flower arrangements. Apparently the mature flowers are fragile (although some authorities do note that artificially opened buds last much longer).

The leaves are used locally for wrapping food for instance for cooking steamed meat or rice (*Oryza*).

In India the stem fibres have been made into wicks for sacred lamps.

Some authorities have noted that the petals and stamens have been used in Chinese facial cosmetics.

The flower is a national emblem of Egypt.

Medicinally, the stamens are used locally during childbirth, and also as a treatment for piles.

The seeds have provided a remedy for leprosy, enteritis, diarrhoea, skin diseases and insomnia, and the whole plant has been used as an antidote for alcoholic and mushroom poisoning. The powdered root has been used to treat dysentery, indigestion and worms, and the flowers have been employed in remedies for cholera, diarrhoea, fever and liver disorders.

