

Pandanus tectorius

[Synonyms : *Pandanus chamissonis*, *Pandanus douglasii*, *Pandanus menziesii*, *Pandanus odoratissimus*, *Pandanus odoratissimus* var. *laevigatus*, *Pandanus odoratissimus* var. *oahuensis*, *Pandanus odorifer*, *Pandanus tectorius* var. *chamissonis*, *Pandanus tectorius* var. *douglasii*, *Pandanus tectorius* var. *laevigatus*, *Pandanus tectorius* var. *menziesii*, *Pandanus tectorius* var. *oahuensis*, *Pandanus tectorius* var. *sandvicensis*, *Pandanus verus*]

PANDANUS (English, French, Malay) is a palm-like evergreen tree. Native to Malaysia, Fiji and Polynesia it has long spikes of creamy-white flowers shielded by very fragrant, long white petal-like spathes or small drooping heads of yellowish-white flowers.

It is also known as *Aggag* (Guamanian), *Balawa* (Fijian), Caldera bush, Common seashore screwpine, *Fala* (Samoan), *Fara* (Tahitian), Fragrant screwpine, *Gulkeril* (Persian), *Hala* (Hawaiian), *Kazi* (Arabic), *Keora* (Hindi), *Ketaka* (Sanskrit), *Ketaki* (Sanskrit, Telugu), *Keura* (Hindi), *Keya* (Bengali), *Lamchiek* (Thai), *Lauhala* (Hawaiian), *Lautala* (Samoan), *Mengkuang* (Malay), *Mudu-keyiya* (Sanskrit), *Pandan* (Filipino/Tagalog, Malay), *Pandan laut* (Malay), *Puhala* (Hawaiian), *Sabotan* (Filipino/Tagalog), *Schraubenbaum* (German), *Schraubenpalme* (German), Screwpine, Seashore screwpine, Tahitian screwpine, *Tala* (Malayalam), *Talhai* (Thai), Thatch screwpine, Umbrella tree, and *Vadra* (Fijian).

Upon reaching the ground the aerial roots take root and help to support the tree. Mature trees can produce 30-40 flower spikes annually.

The flowers are pollinated by butterflies, flies and the wind. On some of the Pacific atolls the seeds are dispersed by land crabs that eat the fruit.

The flowers on the male flower spike (with its leaf-like white spathe) are often harvested with long hooked poles. When they are distilled they yield an essence, attar (in India usually on a sandalwood base, *Santalum album*) or oil known as ‘keora’, ‘kewda’ or ‘kewra essence’. (The perfume is said to have a crisp rejuvenating scent.)

Tectorius is Latin (used for covering) meaning ‘of roofs or growing on house roofs’ with reference to the use of the leaves for thatching – and umbrellas.

Native to south-eastern Asia authorities appear to be uncertain as to whether pandanus is also native to Hawaii (and was added to with the Polynesians’ plants when they landed there) or was originally introduced there by the Polynesians.

The tender white base of the leaves is eaten raw or boiled and the fruit and their seeds are also consumed. The leaves are used in Thai, Indonesian and Malaysian cuisine – and the Filipinos cook the leaves with rice as a flavouring. Australian Aborigines ate the pulp of the baked pineapple-shaped and fragrant, yellowish-orange or reddish-tinged light green fruit – whereas for many Asians this flesh is a famine food. In Sri Lanka and parts of India (especially in the north where the perfume is popularly worn for festivals, weddings and other celebrations) flower water is used to flavour sugar syrups, confectionery and soft drinks. Although the orange-coloured seeds are edible they have to be processed carefully and authorities point out that the removal of their woody coating could be tedious.

In Myanmar (more familiar in the West as Burma) the fragrant male flower spikes have been worn in the hair. It is said that if the spike is placed amongst clothing its strong fragrance can linger for a week. In some parts of Asia the chopped leaves are added to pot pourris and used like the flowerspike for scenting clothes. The distilled flower oil has also offered an ingredient for perfumes especially in India where they are popular among Hindu women. It is in India particularly that the perfume is added to cosmetics, soaps, hair oils and lotions, as well as being used to scent clothing and provide additional fragrance for incense and flavouring in tobacco.

Although there are those who believe wearing them brings bad luck (and even death), some Hawaiians have threaded the aromatic young leaves and the seeds into leis.

On Hawaii and in various parts of south-eastern Asia the dry leaves have been used for making matting – and young leaves have been plaited into hats. They have also been used for thatching and for making fans and baskets – and once were lain as covering over the bodies of the dead. In Burma (often referred to today as Myanmar) as well as Hawaii they have been sewn together for matting sails. Processed, their fibre has also been used for cordage and basketry – and Mauritians have used the fibre for making sugar (or coffee or grain) bags. The leaves have also provided material for making umbrellas and paper – and when cut to an appropriate length and beaten the leaves (or sometimes the root fibres) have also served as brushes for white-washing and painting.

On some of the Pacific atolls the tree's roots have been used to make a black dye. For others the seeds have provided a stain for bark cloth.

The dried seeds have been used as brushes – and in India they have been made into spools for twine.

From records examined, it would seem that one unusual application is associated with southern Polynesia. It is the use of the tree's wood (with fibrous pith gouged out) for water piping. Hong Kong islanders have fed the centre of young shoots to pigs. It is reported that rodents and other animals also enjoy the sweetish-tasting fruit pulp.

For many south-eastern Asian authorities the tree is primarily a source of fibre for basketry, matting, wickerwork, hats and fans.

The tree also features in legends. For instance Hawaiians tell how Pele's canoe was caught in the tree's roots when she first set foot on the Islands. This annoyed her so much that she tore the tree to shreds and scattered them far and wide. As these pieces touched the ground they sprang up as trees which explains why pandanus has been such a familiar sight there.

Medicinally, Indian medicine has employed the bitter-tasting leaves for treating leprosy, smallpox, some venereal disease and various skin disorders. Some Indian medicine employs juice from the roots for treating a range of problems from diabetes and fever to sterility and abortion, as well as for healing ulcers and wounds. The chewed flowers have been given to Hawaiian children by their mothers to swallow as a laxative, the juice of pounded roots (those in the ground as well as the tips of aerial roots) has provided an ingredient in potions prepared to ease chest pains, and in tonics for women weakened from giving birth to many children. Hawaiians have also taken the large quantities of pollen emitted from the male flowerspikes as an aphrodisiac (which probably explains a past custom there whereby a young girl would gather male flowerspikes and flick them over her boyfriend as a love charm). Indian and Burmese medicines (the latter Country is now referred to as Myanmar) use the flower oil as a stimulant and a treatment for headaches and rheumatism – and as a cure for hangovers. Modern research in the United States has included investigation of inhibitory attributes of pandanus on the growth of some human cancerous cells.