

*Artocarpus altilis*

[Synonyms : *Artocarpus communis*, *Artocarpus incisus*, *Rademachia incisa*, *Saccus communis*, *Sitodium altile*]

**BREADFRUIT** is an evergreen tree. Native to Polynesia and the Sunda Islands it has yellow catkins and green flowers.

It is also known as *Albero del pane* (Italian), *Arbol del pan* (Spanish), *Arbre à pain* (French), *Arto carpe* (French), *Artocarpo* (Italian), Breadnut, Breadnut tree, Bread tree, *Brodbaum* (German), *Brodfruchtbaum* (German), *Brødfrugt* (Danish), *Brødfrugttrae* (Danish), *Brödfrukträd* (Swedish), *Broodboom* (Dutch), *Broodvrucht* (Dutch), *Brotfrucht* (German), *Brotfruchtbaum* (German), *Castaña de Malabar* (Spanish), *Châtaignier de Malabar* (French), *Echter Brotfruchtbaum* (German), *Erapillakai* (Tamil), *Etmek ag* (Turkish), *Fruit à pain* (French), *Fruta de pan* (Spanish), *Fruta-pão* (Portuguese), *Frutto di pane* (Italian), *Kathal* (Hindi), *Kelur* (Malay), *Khanun* (Hindi), *Kulor* (Indonesian, Malay), *Kulur* (Indonesian, Malay), *Madrai* (Fijian), *Marure* (Peruvian, Spanish), *Mazapán* (Honduran, Spanish), *Mei* (Tongan), *Mian bao guo* (Chinese), *Mian bao shu* (Chinese), *Pana de pepitas* (Spanish), *Pan de año* (Spanish), *Pan de ñame* (Spanish, Venezuelan), *Pan de pobre* (Spanish), *Pan de todo el año* (Spanish, Venezuelan), *Pannoki* (Japanese), *Pão de massa* (Portuguese), *Pianta del pane* (Italian), *Rata-del* (Sinhalese), *Rimas* (Filipino/Tagalog), *Sa-ke* (Thai), *Seema palaa* (Tamil), *Sukun* (Bali, Indonesian, Javanese, Malay), *Timbul* (Bali, Indonesian, Malay), *Ulu* (Hawaiian), *Uru* (Tahitian), *Uto* (Fijian), *Veritab* (Creole), and *Vilayati-phanas* (Marathi).

The egg-shaped fruit can reach as much as 10 lb. in weight, and the best varieties (many of them developed over centuries by the Polynesians) are usually seedless. Today the seeded varieties are usually grown for their seeds (known as ‘breadnuts’) which are edible when cooked and have a chestnut-like (*Castanea*) taste.

Warning – unripe or ill-prepared fruit may cause purging when consumed.

*Altilis* means ‘fat or fattened’.

The breadfruit has provided a staple food in the Pacific islands, but it is only eaten occasionally in Indonesia and the Philippines and is even less common in other parts of Asia.

In the Polynesian islands other closely related species have long been used for boat building and it was the Tahitian explorers who made long and perilous journeys across the Pacific in their huge canoes who introduced the breadfruit to Hawaii when they settled there. Both legends and religious rites surround the fruit in Tahiti.

In the late 17<sup>th</sup> Century an English navigator, William Dampier (1652-1715) was having adventures off the west African coast and then South America. The route he chose for his journey back to Britain was a long one that took him via the Pacific to China, the Philippines and Australia. William and Mary ascended the British throne in 1689 at about the time that Dampier was returning home to publish a book in 1691 which he called *New Voyage Round the World* – a book that is believed to contain the first European description of the breadfruit with its large egg-shaped, brown to yellow fruit. Well into the next century Captain James Cook (1728-1779) the English navigator, visited Tahiti where he watched cloth being made from the breadfruit’s bark. He also noted the significant part that breadfruit played in the Island’s diet.

The flowers have been picked for use as tinder in Java (now an Indonesian island).

In Britain the breadfruit is associated with a famous naval mutiny. On his third world voyage (1776-1780) Captain Cook had appointed an English naval officer called William Bligh (1754-c.1817) as his sailing master on HMS *Resolution*. And following this in 1787 Sir Joseph Banks (1744-1820) the celebrated English botanist who had accompanied Cook on his previous expeditions, invited Bligh to command HMS *Bounty* on a trip to Tahiti where he was to collect 1,000 breadfruit tree plants that were to be introduced to the West Indies. (There was some idea that the fruit would provide cheap, nutritious food for plantation slaves.) But these plans went awry. After the ship reached Tahiti the immediate sequence of events is still apparently open to debate. Some say that during the six months when the men were ashore they not only collected the plants but also revelled in the Island's hospitality and in several cases formed close attachments with Tahitian women. Thus when it was time to sail many of the men did not want to leave and on 28<sup>th</sup> April 1789 twenty-five men (three under duress from their peers) mutinied under the leadership of the first mate, Fletcher Christian (c.1764-c.1794). Others believe that grudgingly the whole crew set sail at their Captain's command but found that watering the precious collected seedlings as the Captain ordered meant that their own water supply was drastically curtailed – and this was the final straw that provoked the mutiny under Fletcher Christian. Yet other authorities speculate on other possibilities but records are certainly emerging now that Captain Bligh's treatment of his men was not as harsh as legend and rumour has related. Whichever version occurred Captain Bligh with 18-21 other men, food but no charts was cast adrift from HMS *Bounty* in a 23 ft. longboat. 41-47 days later (reports vary) after remarkable hardships and a journey of over 3,500 miles the longboat was fortunate enough to make landfall in Timor in the Dutch East Indies (at the eastern end of the Lesser Sunda Islands). The following year, 1790, twelve survivors returned to England and of the mutineers ten were captured on Tahiti while the remainder went missing and were believed to have settled somewhere in the South Seas. [Some authorities mention that many of the mutineers ended up on Pitcairn Island where some of their descendants (many bearing the name 'Christian') can still be found today.] The court martial of the 10 mutineers began in England on 12<sup>th</sup> August 1792 on board HMS *Duke* in Portsmouth.

In 1793 Captain Bligh commanded another expedition in HMS *Providence* and this successfully transported and introduced over 1,000 young breadfruit trees to the West Indies. But after all the dramatic events surrounding the plant's introduction there the tree has never been able to supplant the preference in the Caribbean for other crops such as banana (*Musa acuminata*) or plantain (*Musa x paradisiaca*). Since that time however the breadfruit has moved on to tropical America as a whole where although it is eaten occasionally it is valued more highly for its ornamental qualities.

In Hawaii the trunk of the breadfruit played a role in the ancient *hula* rituals that originally had a religious significance for the Islanders. Its golden yellow wood (that darkens with age) was made into the drum that sounded the underlying rhythm of the *hula* dances.

Breadfruit wood is termite-resistant and was used for building Hawaiian houses and doors, as well as their canoes. Hawaiians have long been surfers and the lightweight, durable wood from this tree provided material for their surf-boards. It is understood however that the fruit were not one of their more popular foods although they were fed to their domestic pigs to fatten them.

Breadfruit is believed to have a nutritive value near that of brown bread and forms part of the staple diet in many tropical countries primarily in south-eastern Asia, its natural home. Occasionally the solid greyish-white flesh with its bread-like texture is eaten raw, but generally the brown to yellow fruit are peeled, de-seeded and boiled in salted water (like

potato, *Solanum tuberosum*) or baked, or simmered in a stew or roasted. In the West Indies it is also made into savoury fritters. For Hawaiians breadfruit provided a famine food for which the fruit collected during a glut were covered with leaves and buried (generally whole) in a hole in the ground. Despite its rarity in the Country in the early centuries AD breadfruit juice is said to have been an ingredient in a complicated alcoholic Hawaiian brew.

The tree can be found depicted in the national coat of arms of Bolivia.

Medicinally, the Javanese (their Country now part of Indonesia) have used the leaves (roasted and powdered) for treating some spleen disorders, and in Indonesia ashes from the burnt leaves have been used in the treatment of some skin disorders. The Hawaiians once used breadfruit as an ingredient in a potion that was used to treat various skin diseases. In some parts of Asia the roasted flowers have been used to ease toothache.