

Bertholletia excelsa

[Synonyms : *Bertholletia nobilis*]

BRAZIL NUT is a deciduous tree. Native to Brazil, Guyana, Paraguay and Venezuela, it has small yellow white flowers, with a hood-shaped mass of stamens.

It is also known as *Bertoletio* (Esperanto), *Brazilnoot* (Surinamese), Butternut, *Castana del maranon* (Colombian), *Castanha verdadeira* (Brazilian), *Castanheiro* (Brazilian), *Juvia* (Venezuelan), *Juvia štíhla* (Slovak), *Juvie ztepilá* (Czech), Monkeypot, *Noce del Brasile* (Italian), *Noix du Brésil* (French), *Nuez del Brasil* (Spanish), *Paranöt* (Swedish), *Para-Nuss* (German), Para-nut, *Parapähkinäpuu* (Finnish), and *Yubia* (Venezuelan).

Each melon-sized fruit, with its hard shell, can weigh from 2-5 lb. and usually contains 10-24, closely packed, rough, brown nuts – like orange segments (once one is removed, the others come out easily) themselves containing the familiar creamy-white kernels. The fruit take 8-9 months or more to ripen (nuts will rattle having freed themselves from their fibrous attachments) through the opening. The pinkish-brown heartwood turns light chestnut-brown upon exposure to air.

The nuts have a high content of oil. This can be extracted and is known as Brazil Nut Oil.

Warning – the untreated nut oil can cause skin rashes and blistering.

The edible white brazil nuts can be confused with the inedible seed of the tung-oil tree (*Aleurites fordii*).

Excelsa means ‘tall or high’.

The name Monkeypot (also used for its sister tree the paradise nut, *Lecythis zabucajo*) arose because the fruit have been used to lure monkeys. They are adept at removing a nut (which is apparently a monkey delicacy). Trappers wait until the monkey’s paw is inside the nut so that it is caught by the weight and unwieldyness of the heavy fruit and his desire is torn between releasing the treasured food and escaping capture.

The trees grow wild in the forest and when the rivers flood the local South American Indian tribes living in the Amazon River basin paddle their canoes to familiar sites where they search out and collect the fruit which have fallen to the ground from the forest canopy way above. (They cannot be harvested on a windy day because of their weight and this together with their hardness would be enough to kill any man hit by one falling from the canopy above.) Some tribes then celebrate the return of the gatherers and their bounty with a harvest festival. The fruit (except those retained by the tribe for food and oil) are taken to the trading post where they are generally exchanged for pots and pans. From there the fruit are transported to larger assembly points where they are steam-heated and the slightly softened outer shells are removed (often, even then, with the aid of an axe) to release the inner nuts. The size of the harvest can vary dramatically from year to year, dependent upon such things as rainfall, whether a tree has flowered, or whether rodents have reached the fruit before the Indian harvesters do. In addition much fruit can be wasted during the hand processing as only perfectly extracted nuts are exported.

Despite these provisos millions of pounds of Brazil nuts are exported annually, primarily from Brazil and Paraguay, to Europe and the United States. They are especially popular in Britain during the Christmas period. The trade for the South American countries is a highly lucrative one despite the erratic harvest and the vagaries of manual extraction of

the nuts from the very hard outer casings. Sometimes it can even rival that of rubber (*Hevea*) and coffee (*Coffea*). (As yet unsuccessful attempts have been made to cultivate brazil nut but it seems that the trees will only fruit in the wild.)

But at the end of 2003 reports emerged that this valuable South American export commodity (which also had the advantage of giving a justification for maintaining the rainforest thus protecting it from a policy of slash and burn to provide land for other crops) was under threat. Botanists had studied harvesting practices and noted that the regeneration cycle had been undermined by man's competition with wildlife and fungi for the seeds (brazil nuts) – there were not enough young trees growing up beneath the canopy to replace the dwindling older stock. Authorities suggested it would be desirable to introduce a rotational harvesting policy which would maintain the valuable trade but leave areas unharvested periodically – and, more controversially for some, carry out a cull of wildlife partial to the seeds, including the agoutis.

Apart from white ants, these seeds are especially enjoyed monkeys as already mentioned and by local deer (brocket deer), tapirs and agoutis. The latter are particularly important as they known to disperse the seed. Apparently it can take them an hour to gnaw through the very hard shell but when their persistence is rewarded they then scatter the seeds and bury each one – only to dig most of them up later and eat them.

One fascinating quality is brazil nut's ability to absorb strontium in the storage tissues in its fruit from atomic fallout from aerial explosions. Apparently there was a period during the 1960s when the nuts were noticeably radioactive.

Brazil nut was initially introduced unsuccessfully to Malaysia in 1881. But authorities record that the tree first flowered there in 1920 and only fruited for the first time in 1921 in the Malaysian capital, Kuala Lumpur – from seed introduced via Singapore in 1912.

The bark is used to caulk ships. The durable brown wood, often referred to as 'Para chestnut', has been used for ships' decking, general construction, flooring, railway sleepers and furniture – and it is also exported.

The oil is used commercially by the food and toiletry industries (the latter for soap). It is also valued by watchmakers and artists (painters).

Medicinally, brazil nut attracted some attention from Western medical researchers at the beginning of the 21st Century. who were investigating whether selenium found in it could be harnessed for treating some forms of cancer or be prescribed as a cancer preventative drug.