PLANT FACT SHEET

Barringtonia novae-hibernae Laut.

GENUS *Barringtonia* **FAMILY** Lecythidaceae

COMMON NAMES Pao nuts, Cut nut, Navele

EDIBLE PARTS AND USES

Edible parts: Nuts

The kernels inside the nuts are eaten raw or roasted.

CAUTION The related plant Barringtonia asiatica (L) Kurz which grows along the foreshore is used as a fish poison.

DESCRIPTION

The tree. It grows up to 6 or 8 metres tall. The trunk is often only 10-15 cm across and near the top the tree has a few short thick branches. The leaves are large and shiny. The leaves are crowded towards the end of branches. A leaf can be 50-60 cm long and 20-24 cm across. Near the tip of the leaf the edge is wavy and often slightly toothed, with the tip bent backwards. The veins of the leaf show up clearly on both sides of the leaf. The leaf stalk is only short, about 1 cm long. A long hanging yellow flower is produced from the branches. It can be 80 cm long and is densely covered with flowers. There can be up to 120 flowers along a stalk. The flowers do not have a scent. Along this the fruits form, giving a long hanging stalk of quite large nuts. The fruit are oval shaped and about 6-8 cm long by 3-4 cm across. The seed or nut inside the fruit has lines running along its surface. This edible part is about 3 cm long by 1-2 cm across and white coloured. The seed is flattened particularly on one side. Pao nut trees tend to flower and produce nuts throughout the year. There are some different kinds. The size and shape of the nuts can vary slightly. Also some are white inside and some are red. The most obvious difference is the colour of the outside of the fruit. Some kinds are green or slightly blue whereas other kinds are a dark reddish black. The nuts have a fairly hard shell and are split open with a knife. The white part in the centre is eaten raw. It also has a fairly hard texture.

HABITAT

A tropical plant. Trees grow in tropical coastal areas and up to about 600 m altitude. They occur in primary rainforest on rich alluvial soil. They grow naturally and are also planted. In Papua New Guinea it grows in the Huon Peninsula, Manus, New Britain, New Ireland and Bougainville.

PRODUCTION

Cultivation

Pao nut trees are mostly grown from seed. Several different races or types of pao nut have been selected by villagers and these trees seem to produce fruit that is similar to the seed that was planted. Trees can be grown from stem cuttings. Trees grown from cuttings have shorter trunks and branch closer to the ground.

Harvesting and Seed Production

If trees are planted in suitable sites and well looked after, they can produce fruit in a year or two. As pao nuts often do well and are most common on low off shore islands and coral waterfront villages, it may be particularly suited to coral and alkaline soils. This needs to be further studied. Flowering is not seasonal. Well grown trees can produce after one year.

Planting instructions

Pao nuts

Barringtonia spp.

What is the plant like?

A pao nut tree is a small tree in the coastal areas of Papua New Guinea. The tree grows up to 6 or 8 metres tall. The trunk is often only 10-15 cm across and near the top the tree has a few short thick branches.

The leaves are large and shiny. The leaves are crowded towards the end of branches. A leaf can be 50 or 60 cm long and 20-24 cm across. Near the tip of the leaf the edge is wavy and often slightly toothed, with the tip bent backwards. The veins of the leaf show up clearly on both sides of the leaf. The leaf stalk is only short about 1 cm long.

A long hanging yellow flower is produced from the branches. It can be 80 cm long and is densely covered with flowers. There can be up to 120 flowers along a stalk. The flowers do not have a scent. Along this the fruits form, giving a long hanging stalk of quite large nuts.

The fruit is oval shaped and about 6-8cm long by 3-4 cm across. The seed or nut inside the fruit has lines running along its surface. This edible part is about 3cm long by 1-2cm across and white coloured, The seed is flattened particularly on one side.

Pao nuts

Pao nut trees tend to flower and produce nuts throughout the year.

There are some different kinds. The size and shape of the nuts can vary slightly. Also some are white inside and some are red. The most obvious difference is the colour of the outside of the fruit. Some kinds are green or slightly blue whereas other kinds are a dark reddish black.

The nuts have a fairly hard shell and are split open with a knife. The white part in the centre is eaten raw. It also has a fairly hard texture.

Naming of Pao nut trees.

Pao nut is one of the more common Tok Ples names for these nuts and is often used for them in Tok Pisin. They also have different Tok Ples names and they have been given scientific names by scientists.

Two species are grown and used as food in Papua New Guinea. Then scientific names of the two plants are:-

Barringtonia procera
and Barringtonia novae-hibernae.

In 1875, the first plant was named Butonica procera by a botanist named Miers. As more was learned about the plaant it was renamed Barringtonia procera in 1939 by another scientist named Knuth. Sometimes other names like Barringtonia magnifica have been used for this plant. They have now been replaced. The other species was first named by a botanists called Lauterbach in 1911. The name Barringtonia was given after and English naturalist Daniel Barrington who was born in the year 1800.

Barringtonia procera is a less branched tree and tends to grow nearer the coast. The leaves are larger.

Barringtonia novae-hibernae has a more branched trunk and a smaller leaf. It grows more inland and has a sweeter nut.

TOK PLES NAMES

Papua New Guinea

Province Language B.procera B.novae-hibernae
Madang tegeli
Morobe Laluan pao
Manus pulei/purei
New Ireland Pala paua-hutun pao
New Britain Kuanua pao-vutug pao
North Solomons Siwai hari

Solomon Islands

Shortland Is borolong sioko
New Georgia tinga hala/fala/kenu
San Cristobal hara hara
Santa Cruz nua nuado

Vanuatu
va rodh vevingen

In Fiji, a very similar, but different species is used for its edible nut. The scientific name of this species is Barringtonia edulis. It does not occur in Papua New Guinea but sometimes this name has been used incorrectly for the Papua New Guinea plant.

Where do Pao nut trees grow?

Pao nuts mostly grow in tropical lowland coastal areas. In Papua New Guinea they are common along the North coast at places such as Madang and nearby islands, then they are very common in New Ireland and occur on New Britain near Rabaul. They also grow in the Solomon Islands and in Vanuatu. A similar, but different tree grows in Fiji.

The map below will show you some of the places where pao nuts are know to occur.

How do you grow pao nut trees?

Pao nut trees are mostly grown from seed. Several different races or types of pao nut have been selected by villagers and these trees seem to produce fruit that is similar to the seed that was planted.

Trees can be grown from stem cuttings. Trees grown from cuttings have shorter trunks and branch closer to the ground.

If trees are planted in suitable sites and well looked after they can produce fruit in a year or two.

As pao nuts often do well and are most common on low off shore islands and coral waterfront villages, it may be particularly suited to coral and alkaline soils. This needs to be further studied.

NOTES

There are about 40 Barringtonia species.

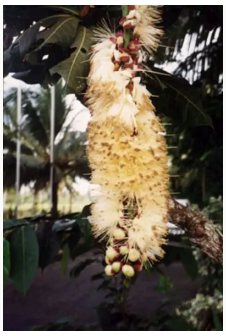
PICTURES



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