

Jelly Palms, Pindo Palms, *Butia capitata*

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Butia capitata palms, often know as jelly palms, are one of the many palms that have edible uses. At present, the correct scientific name is undergoing debate and some are claiming that many of the trees identified as *B. capitata* should actually be *Butia odorata*. For those interested, I suggest you look it up on websites such as Palmapedia. I assume most tree croppers are satisfied to call it jelly palm and know they can use the fruit. However, the MPI Plant Biosecurity Index does not list *B. odorata* and with the continuing nomenclature debate trees for sale are likely to be labelled *B. capitata*, which I will use in this article.

This palm originates from Brazil and Uruguay in areas ranging from forest to grassland, often in sandy or rocky soils. It has been grown as an ornamental palm in many parts of the world including the southern United States, the United Kingdom, Australia and New Zealand. The jelly palm is considered tolerant of temperatures down to -10°C , which makes it suitable for growing across large areas of New Zealand. I noticed it offered for sale in a Dunedin garden centre (I hope they are reputable enough that they know it will grow at least in parts of Dunedin). On a Lincoln University website I saw a photograph of this palm growing in the Christchurch Botanic Gardens. It does need reasonable drainage but it is tolerant of drought and will tolerate coastal conditions.

It is also suitable for growing in pots but it might not produce much fruit. With its pinnate leaves being about three metres long, it is described as a feather palm and is attractive and a good ornamental, able to give a tropical feel to a garden. Although this palm is relatively slow growing its eventual size could be up to eight metres by six metres. It does have spines on its leaves, although they are not as long as the Phoenix palm spines. I would recommend caution when handling the *Butia* palm fronds. Injury from the Phoenix palm frond spines are notorious for causing significant problems, often including needing a spell in hospital.

Evidence of humans using the fruit of this palm has been found dating back to prehistory. The fruits can be eaten fresh or made into a puree, but they do contain a lot of fibre so are more often used to make various beverages (including alcoholic beverages), jellies and products where the fibre is removed. If eaten fresh, they are often chewed to get the flavour and the resultant fibre is spat out. The seed inside the fruit looks like a tiny coconut and has an oil content of 45%, which is reputed to be similar to coconut oil and is sometimes extracted and made into margarine. At times the seed is roasted and used as a coffee substitute.

There are three varieties of *Butia* palms growing in the Auckland Botanic Gardens and in autumn the trees are loaded with large bunches of cherry-sized fruit. The palms usually flower in winter but at the time of writing (January) there are large spikes of immature fruit hanging from the tree as well as flowering spikes. Harvesting of the fruit is carried out when it changes from green to golden in colour, sometimes with a red tinge in summer or autumn. It is reported that it takes about 10 years for the tree to fruit. According to the accession numbers, all the trees in the Auckland Botanic Garden were planted in the late 1990s and they have been fruiting for a good number of years.

I know some Auckland Branch tree croppers have used *Butia* fruit to make a beautiful red jelly. A member mentioned she has a gadget to separate the juice and fibre, or else it can be separated by straining through a jelly bag. Most recipes recommend removing the flesh from the stone, as the stone's oil content will add a woody taste to the jelly. Although the fruit does

have some pectin, most recipes recommended adding pectin and lemon juice. An alternative would be to combine some apple or other high-pectin fruit to the process.

Although the fruits of this palm have been utilized for thousands of years, the plant has not been domesticated and much is harvested from wild trees. Unfortunately, deforestation and the use of *Butia* trees for landscaping is causing a decline in the number of trees left in the wild. However, *Butia* fruit is benefiting from a worldwide interest in the utilisation of less-common fruit. Research shows that the fruit contains a large amount of fibre, significant amounts of vitamin C, phosphorus, anthocyanins and antioxidants as well as other nutrients. In parts of Brazil the juice is produced commercially on a scale sufficient to be used in school lunches.

Descriptions of the fruit flavour vary but include hints of pineapple, apricot, apple, banana and coconut are suggested. The fresh fruit do not last well and should be frozen, processed or used within a couple of days.

Apparently, this palm was popular as a landscaping tree in Florida and California, but its popularity dipped as it produced so much fruit that it left a mess on lawns and driveways. It may seem strange now but there was a period when the attitude that edible fruit had no place in the home garden was common. I can remember reading gardening books that recommended spraying trees to prevent fruit developing because they caused a mess. Fortunately that attitude has changed.

Palms are usually best planted out young, to allow a deep penetrating root system to develop, however older plants are more cold-tolerant than juveniles, so in colder areas it may be better to plant out more mature trees.

The best place to get the trees would be from a nursery, unless you can find a ripe fruiting tree and are fortunate enough to get seed from a palm grower. Imported seed will need a Phytosanitary Certificate, which is expensive and not practicable for the private grower.

Butia can be difficult to germinate, but I notice several websites recommend soaking the seed for 24-48 hours, then sowing them in a well draining mix such as perlite, or with high sand content. The other suggestion is to get the seed as fresh as possible. I did not notice *Butia capitata* seedlings developing around the area where these palms were growing in the Auckland Botanic Gardens, but they were in the lawn and the seedlings would have to compete with the grass. However, the *Butia eriospatha* growing close by in a garden bed had many seedlings growing underneath. Do take care when collecting seeds, as apparently *Butia* can cross easily even with palms in the *Cocos* species, producing infertile trees. Also, some research has suggested that palms with the largest number of fruits are the ones that produce the least nutritious fruit.

I read that the *Butia yatay* tends to grow with an inclined trunk. A *B. yatay* in the Auckland Botanic Gardens is growing at a 45° angle. *Butia eriospatha* is grown a lot in Europe as it is considered hardy. Its fruit are harvested for the pulp. It was grown in plantations in Brazil in the 1950s as the fibre was harvested to make mattresses.

There are other *Butia* palms and a number are already growing in New Zealand, which will likely be available from various nurseries. *Butia* are unusual trees but would be worthwhile growing for those keen to grow a palms for their fruit.

References

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