

Jubaea chilensis

Jubaea is a genus of palms with one species, *Jubaea chilensis* (syn. *J. spectabilis*), the Chilean Wine Palm or Chile Cocopalm. It is native to southwestern South America, where it is endemic to a small area of central Chile, between 32°S and 35°S in southern Coquimbo, Valparaíso, Santiago, O'Higgins and northern Maule regions. It was long assumed that the extinct palm tree of Easter Island belonged to this genus too, but it is distinct and now placed in its own genus, *Paschalococos*.

The genus was named after Juba II, a Berber king and botanist. The common name refers to the past use of the sap from the trunk of this palm to produce a fermented beverage. The sap is also boiled down into a syrup and sold locally as miel de palma.

Although described somewhat disdainfully by Charles Darwin as a 'very ugly tree', many consider the Chilean wine palm *J. chilensis* to be one of the most impressive palms in the

world. In the northern hemisphere, the Chilean wine palm flowers from November to December with fruits ripening from January onwards. The lifespan of this species is not known but there are reports of large specimens in Chile living for several hundred years.

The immense dark-grey trunk of *J. chilensis* grows to a vast height (up to 30 m), with a diameter of 1 m or more, and often has a swollen region though that generally tapers towards the crown. The dense crown supports between 40 and 50 green or blue grey, pinnate leaves, which on dying, fall cleanly to the ground rather than persisting on the stem. Borne amongst the leaves, the large inflorescences hang down and bear both male and female flowers. The spherical fruits are yellow or brown, and, like a mini-coconut, have a nut-like shell with three 'eyes' through which the root emerges at germination. (See photo.)



Jubaea chilensis GBG, some time ago, before deterioration of growing point. FGBG website, photo: Helena Buxton



FGBG logos feature *Jubaea chilensis*



The *J. chilensis* in the Geelong Botanic Gardens was planted in 1867 by the first Curator- Daniel Bunce and was originally inside the Great Raddenbury Fernery built in 1885. It is listed as a Significant Tree by the National Trust and Heritage Victoria and features in the logo of the Friends of the Geelong Botanic Gardens.

The tree grows very slowly, as is usual for palm trees. It takes several years until the *Jubaea* starts getting its weight and size. It may take more than 20 years for the plant to get the height of a medium tree. It can reach a height of 25 m (82 ft) with a trunk up to 1.3 m (4.3 ft) in diameter at the base, often thicker higher up, and with smooth bark. The thickest well-documented *Jubaea* was that on the estate of J. Harrison Wright in Riverside, California which was 5' 6" (1.68 m) thick "at shoulder height". The largest of several specimens at the Adelaide, South Australia Botanic Garden in 1889 was stated to be six feet (1.52 m) thick at the base. A hollow (but living) *Jubaea* in the Valle de Ocoa in La Campana National Park, Chile is between six and seven feet (between 1.52 and 1.82 m) thick at the base, with no apparent taper in the lower trunk. The 3–5 m (9.8–16.4 ft) leaves are pinnate. The largest individual specimen of indoor plant in the world is the *J. chilensis* at Kew Gardens, England.

It needs mild winters, but will tolerate frosts down to about -15 °C (5 °F) as well as relatively cool summers, making it one of the hardiest of pinnate-leaved palms; this is because it grows up to 1,400 metres (4,600 ft) above sea level in its natural habitat. In the wild, the tree lives almost exclusively on the steep slopes of ravines.

Historically, the Chilean wine palm was extremely abundant, but several centuries of destructive over-harvesting for the collection of sap have reduced it to just a few significant populations. The remaining populations of the Chilean wine palm are mainly restricted to protected areas. However, efforts are being made by local conservation groups in Chile to reforest areas lying within the Chilean wine palm's former range. Furthermore, the harvesting of palm sap is now limited under Chilean law, and it is hoped that non-destructive harvesting methods will eventually be implemented.

The sap from the Chilean wine palm can be fermented into a palm wine or, as is more common today, concentrated into a sweet syrup (palm honey or miel de palma.) for culinary uses. In order to obtain the sap, the trunks are felled and the crown cut from the apex of the stem. The sap then drains out over a period lasting several months, sometimes yielding more than 300 litres. In addition to production of palm honey, the edible seeds are also harvested and the leaves are used to make baskets.



Jubaea chilensis
fruit with flesh and seeds
RTBG Hobart
Photo: Nuytsia@Tas, Flickr.com
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Jubaea chilensis
Seed showing the 'eyes'
RTBG Hobart
Photo: Nuytsia@Tas, Flickr.com
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The tree produces small round fruits that are about 2–3 centimetres (0.79–1.18 in) in diameter. The fruit has a very hard outer shell and whitish meat on the inside, like a miniature coconut. The fresh nuts are commonly sold in the areas where the palms grow during their fruiting season.

Family: Arecaceae

Genus: *Jubaea*

Species: *Jubaea chilensis*

Common names: Chilean Wine Palm or Chile Cocopalm

Origin: Endemic to a small area of central Chile, between 32°S and 35°S.

Location in GBG: Mature tree with young plant nearby, in the bed labelled as 'Central Lawn No. 2', although no lawn is growing there at present. A row of seedlings is growing near the western fence of the Annexe off the 19th and 20th century gardens.

Origin of its name: The genus was named after Juba II, a Berber king and botanist.

chilensis means from Chile (latin suffixes -ensis, -anus, -ica and -icus refer to places. eg. *Citrus sinensis* Sweet orange)

References

Royal Botanic Gardens, Kew

<http://www.kew.org/science-conservation/plants-fungi/jubaea-chilensis-chilean-wine-palm>

Wikipedia:

<https://en.wikipedia.org/wiki/Jubaea>



Jubaea chilensis GBG trunk



Jubaea chilensis seedlings do better in open soil than in pots. Western side of Annexe, GBG

Geelong Botanic Gardens Map

Friends of Geelong Botanic



Jubaea chilensis GBG. (Sept 2016)
The growing point is recovering after doing poorly for a couple of years. Was it caused by drought, wind damage or disease?



This information was gathered by Anthea Williams
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www.friendsgbg.org.au
www.geelongaustralia.com.au/gbg/