

SOCIETY FOR GROWING AUSTRALIAN PLANTS

INDIGENOUS PALM STUDY GROUP

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As this newsletter ushers in a New Year, a gentle reminder that all fees are due once more. Fees are \$3.00 as usual, but would interstate members please include 10¢ stamp with cheque to cover cost of cashing the cheque.

THE AUSTRALIAN SCENE - PALMS OF LORD HOWE ISLAND

Four palms are endemic to Lord Howe Island. They are *Howea fosteriana*, *Howea belmoreana*, *Hedescepe canterburyana* and *Lepidorachis mooreii*. Their distribution is controlled by geological factors. *Howeas* occur in lowland areas and up to 250 metres while *Hedescepe* and *Lepidorachis* grow on the heights of the mountains.

	<i>H. fosteriana</i>	<i>H. belmoreana</i>
Geology	- calcarenite recent coral	basalt rarely calcarenite coral
Soil	- variable	stony often scree
Height	- 15 - 25 m	12 m
Ground cover	- ferns, sedges, creepers	sedges, creepers
Density	- 1770 per h.a.	sparse
Altitude	- 0 - 250 m	5 - 20 m

  

	<i>H. canterburyana</i>	<i>L. mooreii</i>
Geology	- basalt	basalt
Soil	- Stony always wet	stony always wet
Height	- 8 m	8 m
Ground cover	- herbs, twiners	herbs, twiners
Density	- very dense	very dense
Altitude	- 335 - 880 m	335 - 880 m

Identification of the species is simple.

*Howeas* have the spadix intrafoliar (no crownshaft).

*Hedescepe* and *Lepidorachis* have crownshafts.

*H. fosteriana* - pinnae join the rachis on the flat plane.

*H. belmoreana* - Pinnae join the rachis at slight upright plane.

*H. canterburyana* - seeds about size of small...

*L. mooreii* - seeds about 10 mm diameter.

General notes.

Howeas have been used for many years as potted plants. Specimens up to two meters are used in the City Hall. *H. fosteriana* is growing in several suburbs. (Kedron, Windsor, Newmarket and Torwood).

None of the other palms have been noticed as yet.

Germination of seed is very spasmodic taking up to three years. *L. mooreii* appears the most difficult.

On Lord Howe Island the Island Board Nursery germinates *H. fosteriana* by the thousand for export. *H. belmoreana* is more demanding of conditions. Small numbers of *H. canterburyana* are propagated for local use. No trials of *L. mooreii* have been carried out.

Some Palms of Cape York - Dr. Alan Cribb & Ed Brighthouse

During a recent excursion to Cape York with the Qld. Naturalists Club, I had the opportunity to see palms that do not occur in southern Qld. On the flight from Cairns to Bamaga, I was astounded at the vast areas of sand hills. There appeared to be hundreds of miles of them. The Iron Range area was an oasis.

In Bamaga township itself, *Gulubia costata* flourished in the creek jungle. They were tall up to 25 to 30 metres, very slender and in fruit. Nearby were *Hydrastele wendlandiana*, *Licuala ramsayii*, *Ptychosperma* and *Calamus* species were plentiful. Along the Cape York road *Caryota rumphiana* grew.

Lockerbie Scrub was a palm paradise. The previously mentioned palms grew in abundance. Two varieties of *Ptychosperma* (*elegans* and *macarthurii*) were compared. *Calamus* species proved difficult to be certain of the species. Here was the first look at *C. aruensis*. The cirri and the leaflets were the clues to identification.

On the coast at Mutee Point were clumps *Arenga australasica*. These clumps contained up to fifty trunks ranging from suckers to mature trunks. Washed up on the beach were numerous *Nypa fruticans* seeds. Some had germinated before being washed to sea. We were told that *Nypa* did not occur on the eastern coast of the gulf. So where did they come from?

Two species of *Livistona* were abundant in their localities. *L. benthamii* preferred creek margins and swamps while *L. muellerii* grew in open forests.

At Somerset there was the lonely *Borassus flabellifer*. Its origin is questionable but its age is about 140 years. It is a male tree. Nearby an overgrown *Cocos nucifera* plantation was in a sad state.

Field Key to the Palms on Northern Cape York Peninsula

1.	Leaves pinnate (feather palms) - - - - -	2
	Leaves palmate (fan palms) - - - - -	11
2.	Plant climbing - - - - -	3
	Plant a tree - - - - -	4
3.	Leaf sheath smooth, leaf ending in a thong with hooks - - - - -	<i>Calamus aruensis</i> . (Lawyer Cane)
	Leaf sheath spiny, leaf without hook bearing thong - - - - -	<i>Calamus australis</i> . (Hairy Mary, Lawyer Cane)
	Leaf sheath spiny, leaflets fishtailed - - - - -	<i>Calamus</i> <i>caryotoides</i> (Fish Tail Lawyer Cane)
4.	Leaves twice pinnate - - - - -	<i>Caryota</i> <i>rumphiana</i> (Fish Tail Palm)
	Leaves once pinnate - - - - -	5
5.	Stems solitary - - - - -	6
	Stems clustered - - - - -	9
6.	Leaf bases clasping to form crownshaft - - - - -	<i>Cocos nucifera</i> (coconut palm)
7.	Ends of leaflets cut off or chewed - - - - -	<i>Ptychosperma</i> <i>elegans</i> (solitaire palm)
	Ends of leaflets more or less acute - - - - -	8
8.	Leaflets spreading, whitish beneath - - - - -	<i>Archontophoenix</i> <i>alexandrae</i>
	Leaflets drooping, green on both surfaces - - - - -	<i>Gulubia costata</i>
9.	Trunk prostrate, mangrove - - - - -	<i>Nypa fruticans</i> (Nipa Palm)
	Trunk erect, not mangrove - - - - -	10
10.	Final leaflets fine and separate leaves regularly spaced - - - - -	<i>Ptychosperma</i> <i>macarthurii</i> .
	Final leaflets fine and separate, leaves regularly spaced - - - - -	<i>Hydrastele</i> <i>wendlandiana</i>
11.	Leaves with distinct midrib - - - - -	12
	Leaflets without distinct midrib - - - - -	13

12. Leaf - stalk 3 - 4 m long, longer than blade - - - - - Coryphia elata  
Leaf - stalk to 1.5 m long, shorter than blade - - - - - Borassus  
flabellifera
13. Leaves circular in outline, with wedgeshaped leaflets - - - - - Licuala ramsayaii  
(fan palm)  
Leaves divided part-way into narrow acute segments - - - - - 14
14. Trees 10 - 16 m tall, leaflet tips drooping  
(along streams and swamp margins) - - - - - Livistona  
benthamii  
(fan palm)  
Tree 2 - 10 m tall, leaflet tips stiff (in open forest) - - - - - Livistona  
muelleri  
(dwarf fan palm)

THE CARE OF PALMS IN THE DWELLING

Only the other day I was standing in a seed shop when a woman came in and said a Palm she had purchased about three months previously for her flat had died, and that she had had many Palms from the firm and none of them had done well, though friends of hers had had Palms from elsewhere all of which were in perfect health. Of course the blame must lie with the nurseryman. And never for a moment did she imagine she herself was the cause of the death of the Palm.

It came home to me then that the people who live in houses and flats in the more restricted districts cannot get as much out of their Palms as they should, though they are plants remarkably suited for such places, though lack of knowledge how to manage them. This is my advice to a housekeeper buying a Palm.

In the first place when purchasing Palms for a house or flat where they will have to spend the greater part of their lives indoors, you should see the plant is well established. By well established I mean a plant that has been growing in the pot in which you buy it for some nine months or so. If it is a plant just dug up out of the ground and potted up for sale, in nine cases out of ten it will "go off".

When you have your Palms home see that they stand in a place where there is no draught and have as much light as possible. Every opportunity should be seized of giving them a spell in the open air, on the window ledge, backyard, balcony, flat roof, etc., and particularly when it is raining.

If you are able, they should be stood outside every night, as the dew refreshes them.

Two things often happen to Palms in houses - either they are over-watered or under-watered. Which is the worst I cannot say, in either case the ultimate result they die. I have seen Palms standing day after day in saucers of water or others that have been regularly watered night and morning whether they needed it or not, just as regularly as the canary was fed. On the other hand, there have been plants forgotten for days and weeks at a time, that at one time have become dust dry, and thereafter have had just sufficient water to damp the surface soil of the pot - such Palms cannot progress.

There is only one way of watering Palms in pots. Take a basin or bucket full of water and plunge the pot containing the palm into it, so that the water covers the soil. Leave it to soak for about half an hour. This should be done once a week.

Another thing never leave Palms in a room where gas light or a gas fire is burning. Remove them to some part of the house where they escape its harmful fumes.

Palms should be washed regularly with soap and water. Sunlight soap is I find by far the best as it has no injurious effect on the foliage. The reason for washing is to free the pores of the leaves from dust, which settles on them in abundance in a house and also to destroy any "Scale" which may attach itself to the plant. Scale is one of the most injurious pests that attacks Palms, and if the plants are washed regularly will do little harm.

Wash with a soft cloth and go over all the divisions of the leaves carefully, the stems and ribs of the leaves. After washing they will appear more attractive than ever. Wash first with the soap and water and then rinse with clean water. Dry with a dry soft cloth.

The plants will do well for you for about two years in the pot in which they came and then will need repotting.

AUSTRALIAN NATIVE PALMS AND HOW TO KNOW THEM

Of the some 40 species of Palms native of Eastern Australia, by far the largest number are to be found in tropical and sub-tropical Queensland. Four species, however, spread into N.S.W., and two of these are very common in the coastal scrubs.

For those interested in Palms and would like the means of identifying any of the native eastern species, I have worked out a key of indentification such as any person without any botanical knowledge can use, which will make the correct naming of any Palm easy, provided it can be examined, in situ. The following is the method of identification with the key.

Having arrived at the starting point of the key our objective is to find one question followed by a name of a genera that can be answered in the affirmative. This is done by following three rules. (1) When the question under consideration is answered by "yes", the question immediately following is the next to be asked, there being no genera given. (2) Where the question asked is answered "no", the question indicated by the number at end of line is the next to be asked, but if no number follows then the next question immediately following is asked. (3) As soon as an answer "yes" is obtained and followed by the name of a genus, the genus named is the one to which the Palm belongs.

- 1. Stems growing upright . . . . . 42
- 2. Leaves divided pinnately (like fishes' backbone) . . . 30
- 3. Flower spikes branched . . . . . 19
- 4. Flowers unisexual (flowers of one sex only) . . . . . 33
- 5. Flowers of both sexes on same tree . . . . . 37
- 6. Leaf segments free, margins projecting upwards . . . . .
- 7. Flowering after the fall of the leaves in the axil of which the flowers were formed . . . . . 27
- 8. Flowers of different sexes mixed on same branch . . . . 23
- 9. Male flowers unsymmetrical . . . . . 16

Archontophoenix

A. *Alexandrae*. - A tall Palm up to 80 feet. The leaf segments are sea green in colour, on the underside. The stamens are six in number, fruit oval round, 6 lines long. Known as "Borun-Bru" or "Ko-Pangara", to the natives. Habitat, Mackay, Rockhampton Bay and other tropical places.

A. *Cunninghamii* Syn., "*Seaforthia Elegans*." - One of our best-known Palms, extending from the north to well down in the south. Tall growing, attaining a height of 70 feet or more. Leaf segments green on both sides, the stems cylindrical and somewhat slender for its size and height. Common in the Moreton Bay district and the coastal scrubs of N.S.W., but ranges well into the tropics. Known as "Wal-garri" or "Piccabeen" to the Queensland natives.

A. *Jardinei*

Has very slender stems, the leaf sheaths forming a long erect point on the other side of the stem, about 3 inches high. Stamens very numerous, being 20 or more in number. Stems up to 40 feet, with a circumference of 12 inches. The leaves are up to 8 feet long. Habitat, Somerset and Cape York Peninsula.

Ptychosperma

P. *elegans*. - A slender stemmed Palm, growing up to 20 feet high, bearing a crown of leaves some 3 feet long. The sheath cylindrical, not jutting out. Habitat, Somerset, Polo Creek.

Normanbya. - Stems very stout, hard and dark, more or less enlarged at the base, attaining a height of 60 feet or more. Leaves from 6 to 8 feet long. The seeds are fairly large, having a diameter of an inch. Habitat, Goold Island, Daintree River and other tropical scrubs.

Calyptrocalyx - Syn. *Laccospadix*

C. *Australasicus*. - A dwarfish Palm with slender 2 inch stems reaching up to a height of 12 feet. The leaves with which it is crowned are 3 feet long and the fruit red. Habitat, Rockingham Bay.

Bacularia (Linospadix)

B. *Monostachya*. - A dwarf Palm only from 6 to 12 feet high. The flowers are almost *infrafolia* and hang down. The fruit is nearly globular and the leaf segments are unequal. Known as "Midgen" and "Walkingstick Palm." Is much used in gardens in the north Habitat. Cape York Peninsula, Wide Bay, Marrochie, Brisbane.

B. *Minor*. - A very dwarf bushy Palm. The stems, which never exceed 6 feet high, spring several at a time from the same root. The flowers are *interfolia pendulus*. Known as "Jak-ar-ungle" to the natives. The stamens are 12 in number, the fruit cylindrical and 8 lines in diameter, tapering at each end. Seed  $\frac{1}{2}$  in. long. Habitat, Moresby and Russell River, Bellenden-Ker. Range, Daintree River.

B. *Palmeriana*. - The dwarfest of our Australian Palms. The stems never exceed 5 feet in height. The flowers are *interfolia* and erect. The fruit from 4 to 6 inches long and 1 or 2 thick. Habitat, Bellenden-Ker. Range.

Caryota

C. *Rumphiana*. - These are tall palms with leaves from 16 to 18 feet long and 10 to 14 feet broad. The leaf segments are oblique and half fan shaped. The fruit is round and more than 1 inch in diameter, white till ripe and then deep purple. They are to be found at Somerset, Queensland, and the Cape York Peninsula.



PTYCHOSPERMA MACARTHURII



THE GLORIOUS THREATENED PALM RAINFOREST