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Greetings once more friends, and my thanks to those thoughtful members that have paid their dues early or at least during June. As this is the last week in July, there are still two-thirds of our group that have not done so and to them, this is a gently reminder: You will have noticed that I managed to put in a little palm news last month and my thanks to Mrs. B. Bosworth for it.

This newsletter will also have a little more, an article by me, already published in Palm and Cycads.

AMONG THE WALKING STICK PALMS

Linospadix monostachya (syn. *Bacularia*) is undoubtedly a very worthwhile species. Indigenous to northern N.S.W. and south-east Queensland, it is an understorey palm of the rainforest areas.

My first recollections of this delightful miniature go as far back as 1931 when as a child I encouraged it from a German grandfather trying to teach me the art of sword fencing. One of his walking canes was a *Bacularia*, and this I learned was one of the many stripped from the northern N.S.W. rainforests at the ending of World War 1 to be used as walking sticks by returning wounded diggers. The idea of conservation was never the issue then, and many acts of mass destruction against the flora and fauna were considered normal in the name of progress. Some specimens having a height of 3 metres in the north N.S.W. and Queensland Lamington Plateau have a trunk (stem) of 3 cm diameter. These were the type usually used for walking canes.

The dug palm had all its roots removed generally leaving a cylindrical to slightly oval knobby ball which when smoothed, sanded and polished made an excellent hand grip. The stem was then cut to a desired length and also polished. A rubber button being fitted to the end. The toughness and strength of this cane has to be experienced to be believed. I have since seen specimens where the handgrip end was ornately carved. This attractive little palm from the family *Arecaceae*, once known as *Bacularia*, but now placed into the genus *Linospadix*, is extremely hardy and will grow in a wide band of climatic conditions, but is better used as an understorey palm and given some shade.

Actually the name *Bacularia* did mean walking stick, while the name change to *Linospadix* simply mean in a single spike referring to the inflorescence of these palms. My first encounter with them in their habitat, was with a group of Australian plant enthusiasts around about 1968, and in the Gibraltar Ranges in N.S.W. We all were conversant with this species, but I for one had not seen it in the wild. Most of our morning walks had taken in the abundant flora, and also some flowering waratah. A species of grass-tree (*Xanthorrhoea*) was also very prevalent. On climbing a steep ridge and entering really dense rain forest it was quite an experience to find a great colony of *Linospadix* growing beneath the trees and *Archoentophoenix* palm canopy. Average height was two metres with a few slighter larger. No seed was evident but some plants had many arching spikes of small buds. These would be generally greenish cream florets there being both male and female on the same spike. Where the crownshaft generally is, the crowded leaf bases were packed with coarse fibre but there was no crownshaft. All the trunk stems I observed were about 3 cm. thick and the stems prominently ringed from the base to just about where the foliage sprouted. *Linospadix monostachya* has delicate but dense crown, the full leaves can be 90 to 120 cm. long, the actual leaflets are pinnately divided into a number of broad and narrow leaflets each one being serrated on the square ends. The number of dull to glossy green leaflets is quite variable. Those examined at the Gibraltar Range had four narrow opposite pairs, one wide fishtail pair, then a narrow pair ending terminally with a broad fishtail. All segments pointing forward.

During the seventies we became very involved with Binna-Burra, a lodge situated on 1000 metre peak in the Lamington National Park. As I was involved in their Greenfinger annual week for nine years, this gave me ample time for a long association with the little *linospadix*. The palm grows naturally in approximately two-thirds of these sub-tropical rainforest areas, and around Binna-Burra to O'Reilly's guesthouse, there would be some 200 kilometres of walking tracks.

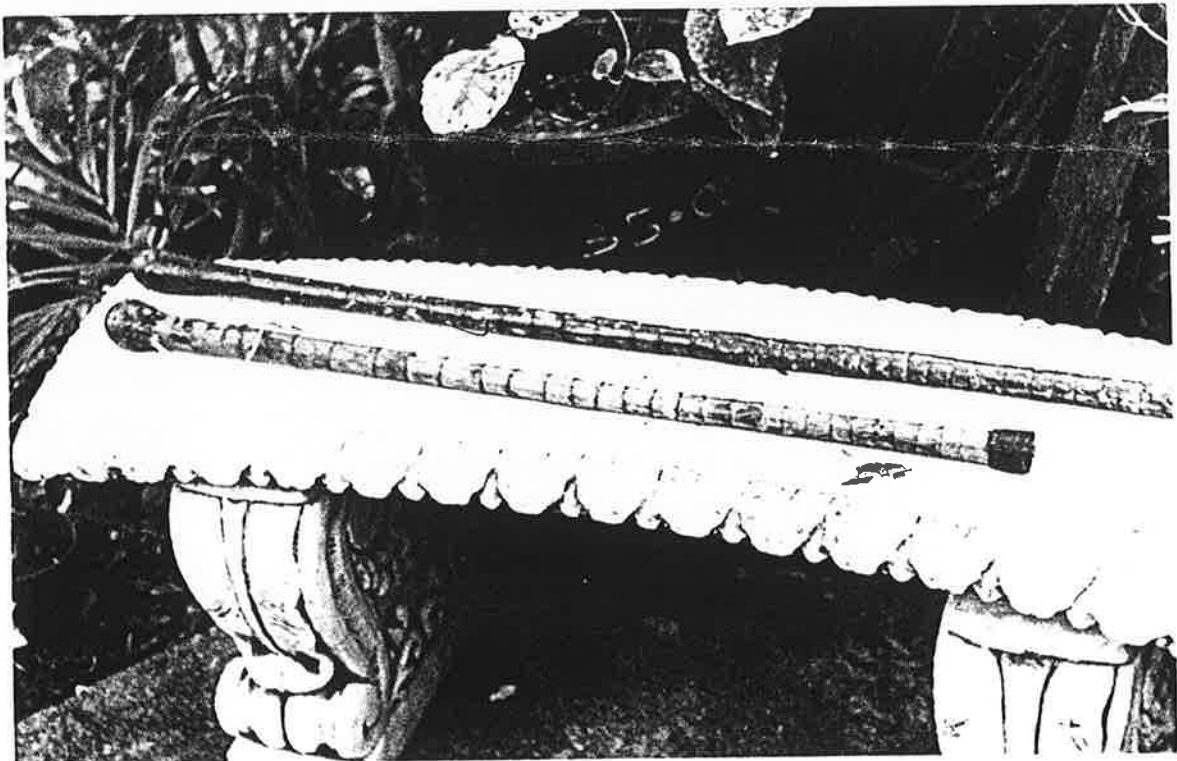
In many of the walks especially down into the cool valleys, the forest canopy is rich with *archoentophoenix cunninghamiana* (PICABEEN) and the understorey has many colonies of the *Linospadix*.

In the early autumn season the arching spike florets become strings of orange to red seed peculiar to this palm is survival emergencies, both the emerging crown leaves and the red seed are edible.

The florets are initially encased in two small leaf sepals, the one above longer than the one beneath. When the top one falls off the floret opens. In the case of the male, pale yellow, ovate and opening only slightly. The female floret is greenish yellow, smaller than the male, and so arranged that there are one female between two males.

I have found this little palm to be quite variable, so much so, I often thought some were another species. At River road, Peachester, slightly inland from Beerwah, it occurs in a 100 hectare section of untouched rainforest scrub still standing the plants attain the height of 4.2 metres tall have a stem thickness of only 2.2 cm. and have quite a pronounced swollen root base. The crown is much as usual except the leaf stems are shorter. This however is merely considered a taller form and about as big as it will grow.

To sum up, it could well be asked that if this plant is so desirable and with so many things going for it, why is it not readily available in nurseries? Seed germination takes at the least six months in the very best of conditions, this alone is a hazard, then the seedling palm has to sit in 5 cm tubes or 7.5 cm growing tubes for approx. 18 months to become big enough for wholesalers to handle.



I have found that this makes it a collectors piece only because only specialised nurseries will handle it. Like the seedling exotic Sabal palm, wholesalers avoid this species because of the slow initial growth pattern. Nurseries specialising in the Arecaceae palms or those that sell mostly Australian plants are the most likely places to obtain this little gem. In cultivation it offers few problems, being able to stand full sunshine (preferring half shade). Loving a deep rich loamy soil, it also grows well in a shallow soil if quantity of compost is around it and ample water plus drainage is there. This palm will not tolerate shifting unless a fair bit of T.L.C. is exercised.

Len. P. Butt

Terrain Habitat, and Culture of Parazamia lomandrioides

Further investigation of the area supporting the little macrozamia sect parazamia seemed by me to be called for following the taxonomy recently carried out by that prolific writer and botanical researcher David I. Jones. David did such sterling work in naming this species, that at least we are a few steps nearer to piecing the clouds of mixed data that surrounds our cycadales.

Unfortunately I do not carry a botanical degree, so try to make up for this by enthusiastic field work keen observation, and I hope some horticultural common sense.

Applying these things, in our latest journey into the area of this species, we again found the entire leafed plants in several spots mostly with very narrow pinnae, erect in the frond, twisted as is P. lomandrioides, and obviously an integraded cross of Jones described cycadale. In my opinion the nearest plant to this, and in a terrain which stretches from Maryborough south to Gympie, encompassing Fraser Island, is the Queensland species Macrozamia sect. parazamia pauli-guilielmi. The fact that this is so to speak a next door neighbour to P. lomandrioides, and at least in the cross so very like it has in the past given taxonomists reason to call it broader leafed pauli-guilielmi. In my humble opinion this Parazamia has closer affinity to lomandrioides than does fawcetti which occurs hundreds of kilometres away.

The described lomandrioides has quite a broad rachis, much as is found in the more inland relict *P. platyrachis*, but there that similarity ends, as in many examined plants the petiole and rachis do complete twists and form more the shape as what I would describe as a question mark? Both lomandrioides and the cross have the same type subterranean caudex as does pauli-guilielmi that is to say ovate to obovate ending in a single generally straight parsnip type root which ends in a point.

The general soil in which lomandrioides grows is obviously low in nutrition, the top crust being greyish white and iron hard, the under layer, a fawnish yellow sand to an undeterminate depth. Local farmer informed me that a ploughed and furrowed field has to be mixed heavily with sugar bagasse to produce a crop and this constantly repeated. Plants observed in the habitat were varieties of *grevillea banksii*, a form of small melaleuce (paperbark) many small undescribed grass-trees xanthorreae, *Melaleuca thymifolia*, blue flowered *Patersonias*, *Jacksonia*, and *Hardenbergia violaceae*. There were many more small genera of wildflowers, but these were the ones I observed.

Specimens taken into cultivation in the past 10 years have responded well to change of habitat, some I have observed being treated as potted plants in deep pots to the original depth with caudex submerged, and just as successfully in shallower containers exposing some 10 cms. of a 30 cm. caudex.

Sandy soil of the area mixed with perlite seems to be successful, but the plants will acclimate just as well in a very sandy loam with added perlite and hammermilled pine bark added.

This genus does not seem to be very endangered as yet, maybe because of it being physically so dissimilar to known cycads, and is specifically a collectors curiosity piece, not at present thought of for landscaping but obviously could be used on the downslopes of terraced land.

L.P. BUTT

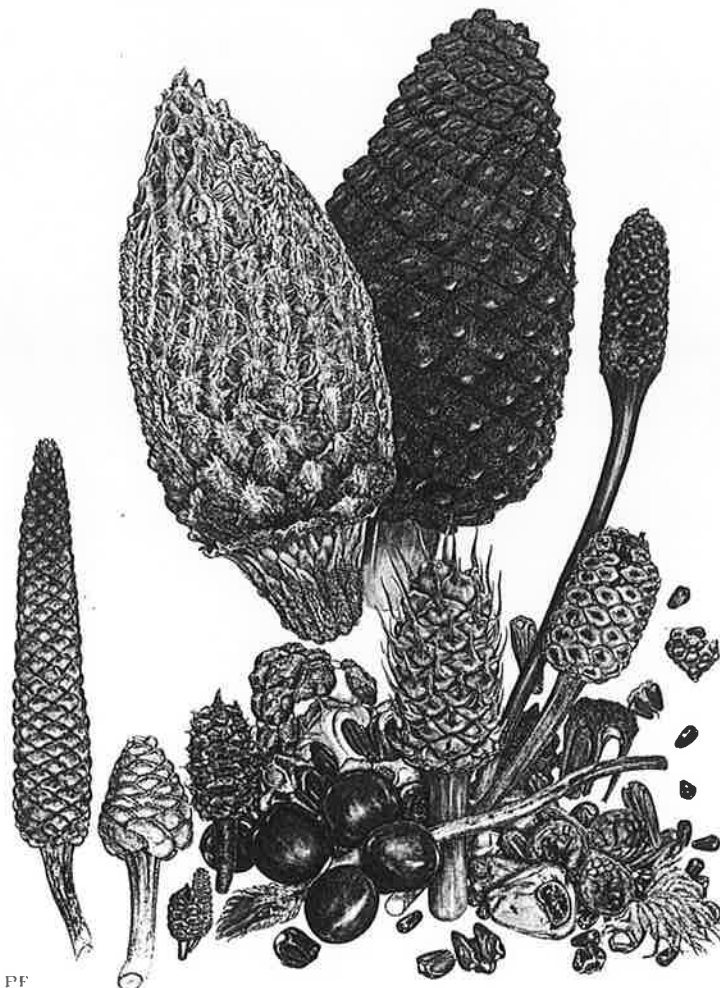
BOWENIA SP. NORTH QUEENSLAND

Having often heard of, and received reports of an additional form of the genus *Bowenia*, other than the known *B. serrulata* (Chamberlain) and *Bowenia spectabilis*, I had not till very recently actually seen it. Also knowing that variants do occur in all indigenous plant material, I can understand the hesitancy for botanists to name it and create a new species. Indeed the little I have sent to Sydney authorities regarding variations in both the species of this genus has received a polite 'Just another variation of what is known'.

The plant I viewed had much of the growing habit of *B. serrulata* and like it an ovoid caudex. This may or may not be the normal habit as *B. spectabilis* has an elongated caudex generally. The dichotomous branching of the rachis was also apparent, but of course my material was still in a very juvenile stage. The pinnae is what is so special, as you will see in the material photo copied. The pinnae/leaf, is every pinnae, not just a few on each stem of petiole. It came from Jelattin which I am told is in the Port Douglas to Daintree area.

What is now urgently needed if we care to be termed a study group, is for all members in or around its area slightly North-West of Port Douglas at Jelattin or into the Daintree, to look see and report further on this plant as it just could be worthy of a new species name.

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| <i>Bowenia serrulata</i> | <i>Encephalartos ferox</i> |
| <i>Ceratozamia norstogii</i> | <i>Encephalartos villosus</i> |
| <i>Chigua restrepoi</i> | <i>Macrozamia communis</i> |
| <i>Cycas circinalis</i> | <i>Stangeria eriopus</i> |
| <i>Cycas revoluta</i> | <i>Zamia furfuracea</i> |
| <i>Dioon edule</i> | <i>Zamia pumila</i> |
| <i>Dioon mejiae</i> | <i>Zamia pygmaea</i> |





$\frac{1}{2}$ serrate.