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CYCAD & ZAMIAD STUDY GROUP

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Hi members,

Here I am again striving to fill this column with something new on cycads. My ambition is to take a long trip past Alice Springs to Macrozamia macdonnelli country! Just to see the big glaucous zamiad with that procumbent trunk we hear so much about. The cone that carries those really large seeds must be quite immense.

According to Rod Horner and Don Stallard it grows in very steep hillsides on very stony,arid soil and just seed collecting is quite a hazard.

Before this year finishes I will be publishing a new list of members and we now are about 50 strong!

As I go up into Lepidozamia hopei territory I also may have more to report on them later. Hope you like our new picture page.

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According to L.A.S. Johnson the section of PARAZAMIA where PAULI-GUILIELMI occurs there are three sub-species only.
ssp PAULI-GUILIELMI occuring in S.S.W. Qld. and Nth. N.S.W.,
ssp FLEXUOSA in N.S.W. Some few other forms have twisted fronds and have been in the past confused with pauli-guilielmi, but the true species is twisted throughout the length of its rhachis and the pinnae only 2 - 4mm broad.

ssp PLURINERVIA has pinnae CONCAVE or CONVEX 4 - 7mm broad.

ssp FLEXUOSA broadest pinnae 4 - 8mm broad pinnae concave.

Further to this we have found variants at Bundaberg districts and lately at Wallaroo Station near Arcadia Valley.

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More on M. moorei - Len Butt

Quite recently came the opportunity to view and collect that member of the zamiaceae, I have termed the magnificent cycad. Macrozamia moorei we have found in Carnarvon Gorge in abundance and also in gully pockets around Springsure, but this location was bordering Arcadia Valley on the extensive 75,000 acre property of Mr. Fearnside, Wallaroo Station, not far from Carnarvon Ranges. This grazier is well aware of the potential historical value of artifacts and jealously preserves the aboriginal sites on his property. I sincerely hope that after our weekend, he regards his resident zamiads in like manner.

Wallaroo has large areas of iron bark forest and the terrain has deep sandy loan Acacias seen were a. macrodenia (zig zag) and small stands of the large silver leafed a. bancroftii. We also were shown a beautiful local timber that can be polished or worked successfully, and creates quite artistic pieces in cabinet making and sculpture. The small tree Lysicarpus augustifolius is Tom Russell's mahogany or "BOOGOORU". We arrived at approx. 9 a.m. on a Friday morning and armed with a back hoe proceeded through the iron bark forest to an area roughly between the station homestead and the cliffs of the Carnarvon.

Macrozamia moorei comes into view, first as isolated large and small plants, then as a veritable forest of giant specimens that straddle the landscape and dot the hillsides. Occasionally a real old giant reared its caudex from the smaller neighbours. One such colossus was at least 6 metres of caudex before the fronds started. Such a plant would probably be well over the 1,000 years of age. The average specimen seems to be about 3 to 4 metres high including frond crown, but even these start trunks of about 60 cm's thick.

One main area had fire blackened caudices but the fronds had grown back down to cover these scars. Others, more recently burned still had rings of lower blackened frond rhachis, while new fresh fronds arose from the crowns.

Both male and female plants were plentiful, and easy to spot even without the visible evidence of opening seed cones on the female and narrow pointed cones on the males. The male plant is multi-coned always, while the female seemed to have only 2 or perhaps three large cones. Many plants without cones had quite large quantities of half-buried seed around the caudex and quite some few of these showed evidence of germination.

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Large burrows of marsupial bandicoots were around the plants also, and of course the flesh of the seed is staple food for these, as well as for possums and the wandering wallabies, wallaroos and kangaroos, which live in this area also. Unfortunately here, as elsewhere in Australia the opinion still exists that the only good roo is a dead "roo"!

Macrozamia moorei, like all the Australian cycadales has a remarkable defense mechanism whichis probably why they have survived over all the millenia of years!

Fire blackened after drought the stumps produce great masses of soft succulent rhachis fronds from the apex and these are highly impregnated with the poison MAM, which if eaten by stock, causes the infamous "wobbles" to hungry foraging stock.

One very clear fact emerges, that if the cow eats of these fronds its paralysis does not effect the meat. Also if fed by the farmer, the beast will continue to live and produce healthy calves, which can be reared successfully.

Our host also mentioned that although his station cattle ate the older fronds quite a bit, there was no apparent "wobbles" resulting. This bears out my previous statements that the older fronds do not carry large supplies of the poison. It occurs in the seed kernels and in the new baby fronds only.

All pinnae of the Macrozamia moorei is extremely stiff and very sharp pointed, which also is a deterrant to cattle, and a hazzard to collectors trying to remove a plant.

Quite a quantity of ripe seed was found, still within its large cone covering. A very attractive green and orange cone resulting. Some broken cones appeared to have very immature seed and feed these had been attacked by marsupials in search of food.

Although this macrozamia is huge in form, a large one took no more than 15 minutes to dig and lift on the arm of a back hoe. Bottom fronds were neatly sawn off for transporting and quite a large number of plants were removed to the satisfaction of the farmer and the delight of collectors, remembering always that preservation by cultivation is probably the only way we will eventually save these remarkable antique plants that are direct links to the past of our planet.

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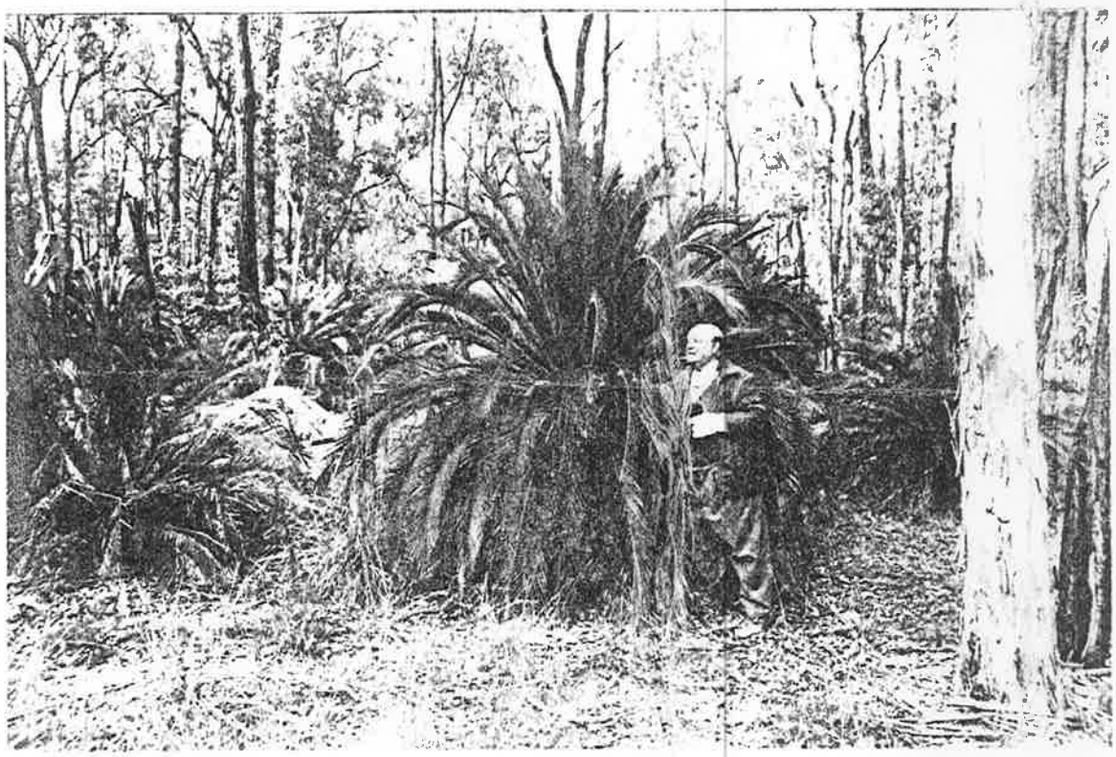
When Mueller named this plant for Moore, he must have been very impressed by its similarities to the African genera. It was first named ENCEPHALARTOS. Dr. L.A.S. Johnson states that hybrids have been found between M. moorei and M. Lucida which is of the parazamia section.

In Queensland I have not found lucida in the areas of moorei, but have seen a form of macrozamia section parazamia pauli-guilielmi with wider rhachis and pinna than the coastal type (possibly ssp. PLURINERVIA). There was also some that were most probably a cross between moorei and this planet. All this within the boundaries of Wallaroo station.

Macrozamia moorei is remarkably quick growing as cycadales go. Reports are that if set in rich deep soil, they have formed a 2 metre caudex in less than 100 years of age. Unfortunately, and mainly because it occurs in country where cattle now graze it has a maligned reputation probably as much as the genus cycadaceae of our northern climes.

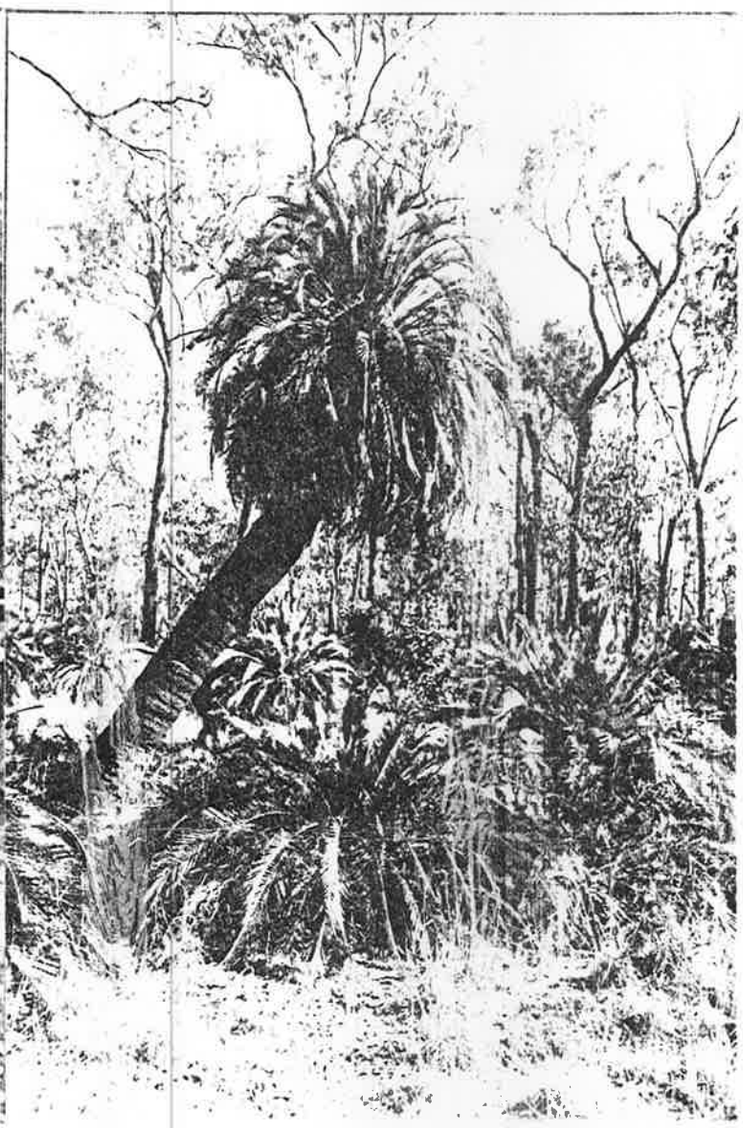
Certainly no government has any moral right to place a unique native genus on a noxious weed list, which could result in their eventual demise and complete extinction from our planet.

I have yet to find out if the core of Macrozamia contains pith to produce edible sago, as does the genus cycas, i.e. Cycas revoluta and C. circinalis.



L. BUTT & MACROZAMIA MOOREI — WALLAROO STATION.

CLOSE UP OF MATURE SEED CONE — MACROZAMIA MOOREI.



FIELD OF MACROZAMIA MOOREI