

SOCIETY FOR GROWING AUSTRALIAN PLANTS

CYCAD AND ZAMIAD STUDY GROUP NEWSLETTER NO. IV

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Latest project for our group consists of investigation into latest information on hand ex America, that *Cycas* has been exported to that country by sawing off the caudices just above the ground, removing all leaves and upon arrival, transplanting.

If this is authentic it means a genuine breakthrough in our collecting large plants for study and cultivation without the difficult and arduous job they now entail. The main thing is to ascertain if the cut caudex will re-root satisfactorily.

Also whether the stump that is left will form new heads, and if this is positive, do the heads appear at the cut or at the plant's base.

Mr. DOW ARIEN B.Sc. of Yeppoon reports successes in tissue culture with *Bowenia serrulata*.

Further study with *Bowenia serrulata* are in progress at present.

A few members still are unfinancial for 1980, and I would appreciate that this be rectified soon, as it is unfair that unfinancial members get this bulletin as well as those who have paid their fee.

With little or no information coming in from up north to date, it is gratifying that our Mrs. Bosworth of North Queensland, but now in Brisbane on holiday has come up with a gem of news.

She reports that many of the *Lepidozamia hopei* in the Cardwell to Mission Beach area are multi headed, sometimes having three head caudices.

Suggestion is that maybe high winds cause caudex damage and the plants rejuvenate by growing more than one head.

I have seen a few *Lepidozamia hopei* that have done this, but did not realise there were a lot more like it.

Len BUTT
EDITOR

THE LOCAL MACROZAMIA MIQUELII

by Margaret Telfer

Notes on *Macrozamia miquelii* growing in the Upper Brookfield area on the outskirts of Brisbane.

The genus *Macrozamia* consists of fourteen species which are endemic to Australia. The plants of *Macrozamia miquelii* that grow in the Upper Brookfield area seldom have trunks more than half a metre long. Their long slender palm like fronds are less coarse than *communis* and give a soft tropical appearance to the landscape.

Macrozamia miquelii have been seen growing in a variety of environments in the Upper Brookfield area, from dry scrubland to creek banks which run through rainforest areas; but all grow in areas that have at least a small amount of shade. They are often found growing with *Xanthorrhoea* species in the dry scrubland. *Macrozamia miquelii* are prolific in the Upper Brookfield area.

The cones of *Macrozamia miquelii* start to mature approximately January and can be harvested up to May. After this time most cones have split and been scattered by wild animals, and only the occasional seed can be found near the parent plant. The orange coating on the seed is eaten by possums, bandicoots, and dingoes and so the seeds are readily distributed throughout the immediate area. Domestic dogs have also been seen nibbling at the fresh seed coatings, and upon nibbling at them myself, the taste was found to be most unpleasant. The starchy kernels are also eaten by other animals. Toxic compounds are present within the seed proper, but can be removed by vigorous washing and pounding.

Some cones appear to be a light orange colour when mature but others found were dark red and still not ripe. It was thought that possibly differing degrees of sunlight had some influence upon this colour variation but after closer investigation it was found that both coloured cones were appearing on plants growing in the same area. It has hence been concluded that intenseness of colour is not an indication of cone maturity. Perhaps this colour variation may be caused by parent plant maturity or soil composition.

The cones of *Macrozamia miquelii* are approximately the size of a double fist. Most cones are well packed and some contain as many as sixty seeds and most would have at least thirty seeds. Occasionally some young female plants produce a very small lightly seeded cone.

It has been noticed that after coning the female plants seem to have drooping fronds. This may be caused by animals standing on fronds to reach the ripe seeds. As the seeds disperse however, the fronds gradually retain a more upright appearance. No outstanding difference has been noticed between the male and female plants. Occasionally the female plants will be surrounded by a hundred or so yearold seedlings. Very few of these seedlings reach maturity when they germinate so close to the mother. Some female plants have been known to produce four cones in one season. These are usually the very large plants. Most display only one or two. Female plants do not bear cones every year.

After the seeds have been harvested they are soaked in a bucket of water for two days. The seeds that float are supposed infertile and discarded. The remaining seeds are peeled with a sharp knife and then half buried on their sides in a mix of 3 parts sharp river sand to 1 part peat moss. Within a year of planting most seeds are showing one frond and have a tap root about 30cm long. As with most cycads they are relatively slow growing.