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SOCIETY FOR GROWING AUSTRALIAN PLANTSSGAP QLD REGION
- LIBRARY -CYCAD & ZAMIAD STUDY GROUPNEWSLETTER NO. 12JANUARY - FEBRUARY, 1982

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Hi, Ho! for a better New Year and renewed enthusiasm by all. 1983 subscriptions now due. One very enthusiastic new member is Dr. G. Long of 35 Fowler Street, Camperdown, 2050, with a promise of possible transparencies of the New South Wales Burrawang in habitat. Thanks for this offer.

Special competition:- For the best slide of macrozamia (N.S.W. origin) and best slide of cycas taken coastal far north Qld. - Prizes of four (4) named cycadale seedlings for both areas.

All slides returned if postage included. Chosen slides may be published. Cycad and Zamia group and SGAP can enter. Closing date - EASTER, 1983.

Here below are interesting letters from real active members of the society who may inspire others. First from Don Stallard whose roamings are between Perth & Darwin areas.

Between Xmas and New Year a number of us travelled 400 kms south to Mataranka and Elsey Stations where I had expected to possibly find specimens particularly in the back blocks of Elsey Station where the limestone rock formations are similar to the Katherine area (renowned for our *C. calcicola*) and the land shape is supposedly a lot more fertile. Unfortunately were stopped from entering onto the main part of the property although we were able to go to Elsey Falls (a fairly untouched area) on the Roper River.

Len, if you have any official documents or influence for one to obtain permission to enter the property it may be worthwhile as I have it from good authority (workers of the Conversation Department) that the area has some unusual plant, animal and bird life. In fact there is a move on to turn it into a National Park. The area in question lies around the Red Lily Lagoon and upper reaches of the Roper River.

The reason for the restriction on the Elsey Station appears to be due to the movie "We of the Never Never", where a mock up of the station was constricted very near to the true Elsey Station of today - seems everybody is keen to view it.

Margaret Telfer's photos of the upper Brookfield area *Macrozamia miquellii* shows trunks to 2½ ft. high (75cm) - Fronds are upright distinctly bluish. Seed cones as large as *miquellii* growing much farther north.

The more I see of *miquellii*, the more I find it to be very like the *Macrozamia communis* of New South Wales (especially the upper Brookfield version). The Brookfield *miquellii* is the nearest stand of this *macrozamia* to Brisbane, or is it the most northerly stand of *communis*? (worth study?).

Mrs. H.B. Bosworth of Ingham, North Queensland writes:-

My cycads seem to be growing fairly well. I was delighted recently to find a root growing down from one of my *Cycas macdonelli* seeds! I have waited over a year for some sign of life. I hope some of the other seeds get going now. It is tiresome just waiting.

My *Cycas media* is seeding again. Seems to seed each two (2) years. *C. media* is very common, mostly on foothills, up this way, but I often wonder what the different points of some of the other cycas species are. If you could tell me some distinguishing features of cycas likely to be found in these parts, I could keep a look out. Some *C. media* seem to have very strong thorns on the lower end of the leaf, but others in the same area can be completely without thorns on the stalks.

I find the bowenias don't really like being disturbed when repotting. If they get a big disturbance, they seem to lose their leaves and take a long while to come round again.

Lepidozamia peroffskiana makes a lot more new leaves than does *L. hopeii*, per year, so that the latter is going to be a lot slower to make an attractive pot plant.

BOWENIA IN NORTH QUEENSLAND

by Robert Tucker, Anderson Park Botanic Gardens,
Wellington Street, Mundingburra, TOWNSVILLE. 4821.

The genus *Bowenia* Hook. ex Hook. f. belongs to the tribe ZAMIEAE Reichenb. in the family ZAMIACEAE Richenb. It consists of two endemic species confined to Queensland.

Bowenia is unique amongst cycads in that it has decompound leaves, all other genera are simply pinnate although some lobing or dividing of the leaflets may be present. It is this very striking and unusual feature of *Bowenia* which make it highly distinctive. It also shows some advanced features and its affinities are not with other Australian Zamiaceae but apparently with the New World genus *Zamia*.

The two species of *Bowenia* are morphologically similar but cannot be confused. They are also members of different plant communities and in only one location do they occur within close proximity of each other.

Bowenia spectabilis Hook. ex Hook. f. is the type species of the genus (1863) and is confined to the moist rainforests of north-eastern Queensland from about Cooktown south to the rainforest limit in Rockingham Bay. It extends inland some 45-50 km. and up to at least 700 m. altitude. The habitat is usually the shaded rainforest floor but quite healthy plants can be found on rock faces near waterfalls and along creek banks. It seems to be requiring of a permanently moist soil and a high humidity. Soil type does not appear to be highly important however the plants can be quite abundant on red volcanic loams.

B. serrulata (W. Bull) Chamberlain (1912) was initially thought to be a variety of the type species. For a full treatment of the synonymy involved see Johnson (1959). This species is more characteristic of moist sclerophyllous forest but occasionally enters into rainforest. It has three main areas of occurrence, two of which are not widely understood and one of which is not verified by the present author. The main occurrence is in the region directly north of the Tropic of Capricorn from about Yeppoon to St. Lawrence and mainly on the coastal flats and hills in moist open forests.

The second occurrence is in the Casuarina dominated scrubs around Lake Tinaroo near Atherton where it is grows next to B. spectabilis but apparently does not hybridize with it. The population there is considerable. The third occurrence is quite a good way further north in the McIllwraith Range on northern Cape York Peninsula. The present author has not seen this population and knows nothing of the habitat associations there, the information comes by way of C.S.I.R.O. collectors.

It would seem from the above that B. serrulata is far more widespread and common than most people assume. Its occurrence on the northern Peninsula is quite amazing considering the distinctive flora of that region which has greater affinities with Papua than with southern Cape York Peninsula. It would be very fascinating any exciting if Lepidozamia were to be found in that region where as far as it is known only Cycas occurs.

Bowenias do very well in cultivation and can in north Queensland grow into fertile plants in 5 years from seed. With this knowledge it is surprising that they are not more commonly cultivated but perhaps that is fortunate, for the nurseryman is more apt to be lazy and remove plants from the wild rather than raise seed.

The main difference between the species are fairly reliable and can be set out as follows:-

<u>character*</u>	<u>B. spectabilis</u>	<u>B. serrulata</u>
1. leaf height	up to 2 m.	up to 1.2 m.
2. leaflet form	lanceolate	rhomboid
3. rachillae	- drooping	semi-erect
4. leaf width	up to 1.5 m.	up to 1 m.
5. plant form	solitary	clumping
6. leaflet margin	entire or rarely preamorse	finely serrate

* these characters are fairly uniform but some deviation can be expected under various circumstances. A false-clumping effect in B. spectabilis can arrive through the germination and successful establishment of several seeds together or rarely very old plants divide, particularly on volcanic soils.