

SOCIETY FOR GROWING AUSTRALIAN PLANTSCYCAD & ZAMIAD STUDY GROUPNEWSLETTER NO. 16MARCH - APRIL, 1984 ISSUESGAP QLD REGION  
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Dear friends,

Once more the newsletter and my thanks to those prompt people who sent their subscriptions for 1984. However there are still at least half of you that may not realise you have not as yet paid. Everyone will get this newsletter this time.

No news is the order of the day on my booklet on Australian cycads which is down in the hands of Bill Payne of SGAP. Seems he is having trouble with others doing a similar work. My grateful thanks to those who helped me with transparencies and new material of late. It seems there is now a worthwhile research project group that are willing to help study groups. I have already made the first moves on your behalf about this project. Apparently it needs \$25 from each group to augment a research project. This we can afford from our funds at this time because of our economic method of printing. Projects I have asked for is research into the genus cycas with clearer descriptions and definitions.

Seems that some of the newer members are really enthusiastic. Harry Franz of Goomeri writes that he is interested in the 'tree zamia' at Rolleston. This of course is *Macrozamia moorei*. Further to this he mentions stands of a zamia on the roadside at Mt. Morgan. I identified this as one of the *Cycas media* variants.

A few weeks ago some of the group and the palm/cycad society met at Margaret Telfers home in Upper Brookfield. On a neighbouring property up a precipitous road we found that form of *miquellii* that Margaret has mentioned quite often. Best find was the very good specimens of female cones just ready for picking. Several transparencies and prints were taken.

One of my cycas 'heads' is throwing fronds for first time. *Cycas calcicola* from Finnes River. First impression of course, silver new foliage, now it develops as four fawn fronds with very fawn rhachis.

Dr. Norman Long of Camperdown, Sydney has sent along some very good prints of *macrozamia communis* plus negatives which can be loaned out for copies if needed.

Don Stallard as dependable as always, sent in a few more slides to go with the material already down at SGAP Sydney.

I do know the SGAP excursions people are off once again and will travel up the centre about June. This time right through *Macrozamia macdonnellii* country plus *C. armstrongii* and *C. calcicola*. Here's hoping that on this third safari a lot more cameras run hot and the gymnosperms get their share.

Here I enclose my definitions taken from Charles Chamberlain's book 'Living Cycads' 1919. He quotes:

For a study of the phase of fertilisation the cycads are unfavourable, since events are very rapid, materials is hard to secure and the ovules are so large that almost an endless time is needed for making preparations.

In the genus Stangeria is an interesting feature common to all the family, the long interval between pollination and fertilisation.

Fifty years ago things were confused and the process of pollination was mixed with fertilisation, in reality they are two phenomena.

In the American Dioon the pollen is shed late in September and fertilisation occurs late in April ( a 7 month interval). During this period there is a gradual growth of the pollen tube, but later near the end of the period a rapid development produces sperms with ciliated spiral bands. This occurs also in pines and oaks for most flowering plants, the period is but a few days.

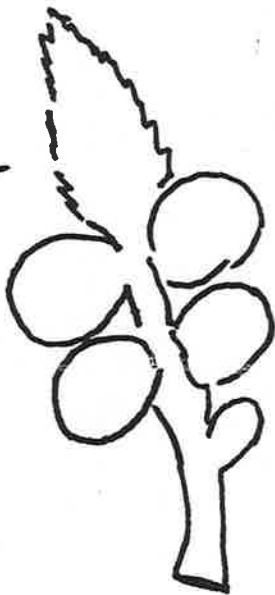
Sperms within the pollen tube are approximately 200 microns in size, 1 micron being  $\frac{1}{1000}$  of a millimetre! (unquote)

It would appear that the pollen with the sperm drifts or is brushed on to the receptive end of the seed and a protoplasm moisture appears which absorbs it, and draws it within the seed.

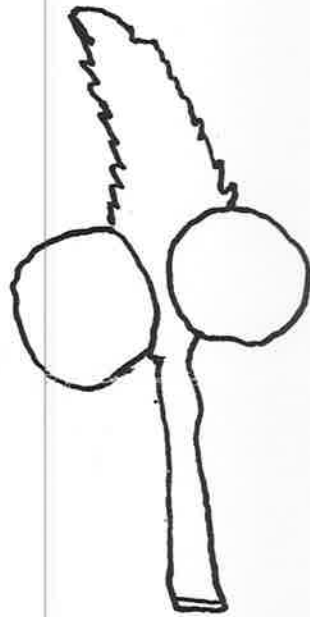
FORMATION OF SPOROPHYLL  
AND SEED ON  
SOME CYCAS.



CYCAS  
REVOLUTA



CYCAS  
CIRCINALIS



CYCAS  
MEDIA

THIS IS TO INFORM QLD REGION  
I HAVE APPLIED FOR RIGHT TO  
FORM AN INDIGENOUS PALM group  
of SCAP. which I will handle  
separately to the Cycad group  
please tell your members

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