STYLIDIUM STUDY GROUP. NEWSLETTER No 4. MARCH 1980

As most of you will be aware, a general meeting of the Study Group leaders was held in Sydney last year in conjunction with the Federal Conference and seminar. I was unable to attend, but I have now received a report of the meeting. Some points of interest are as follows.

1. Subscriptions. that $2 is a realistic rate, in view of cost increases in recent years.

2.Correspondence. members writing to leaders and expecting a reply should include a stamped, addressed envelope.

3.Newsletters. the aim should be three at least per year. I have trouble finding time to organise two. Anyone interested in taking it on or at least sharing the load?

4.Published report. It would be nice to have a preliminary report out by the end of 1981. I would hope that it might cover soil mixes, microclimate requirements, vegetative propagation (division, offshoots and cuttings) and the problems of keeping Stylidiums alive for more than one season. When the groundwork has been done we can perhaps deal with each group in turn.

I will be looking to you for contributions to the report, however small and insignificant you may think it.

5.Botanist member. it was suggested that a botanist be seconded to each study group (by whom and from where was not indicated). I think that is a great idea but probably not practical except in special cases. However, if you know a botanist who is prepared to co-operate,'grab him' (or her) before someone else does.

At the end of N/L No 2 I mentioned preparation of a bed for Stylidiums. This was an oval bed, to the north of several melaleucas, with shelter to the west, and consisted ofabout 5-12" of sand/sandy loam on a cleared area of ground, retained by a couple of courses of bricks. This was unfortunately a failure because the surrounding shrubs invaded the bed with their roots and kept it parched. A better idea would have been to lay the sand on polythene to keep out the invading roots.

Last spring I tried a new potting mix of 5 parts gravel, 5 parts sand, 2 parts peatmoss and a handfull of blood & bone. I divided several species including S. ciliatum, S. piliferum and S. brunonianum, The results indicated that the mixture is OK in the short term, though some plants in each group died.I kept all my plants watered during the summer, but next year I intend to let at least some of them dry out.

More than 100 plants have now been distributed to members and there should be some more this year as I have a number of pots ready for breaking up. I am concerned at the rather slow rate of distribution, but as long as we are restricted to vegetative propagation there is not much I can do until the members' plants are big enough to yield second generation plants. Seed is still only rarely available and appeals to W.A. have been fruitless (no pun intended) .

On the subject of seed, work by Dr S James at UWA indicates that some species of Stylidium have a lethality factor such that self pollinated seed is infertile. In fact the percentage of viable seed set is greater between colonies than within colonies. Thus for efficient seed production we will need plants from two or more colonies of a given species.

My experience with a limited amount of seed suggests that it holds its viability quite well, for several years at least. I have tried sowing indoors by the 'bag' method, and in a cold frame, both in winter. Germination

was fair, but the seedlings failed to progress. Some S laricifolium and S. soboliferum have just started to germinate (Feb) after being sown in August and then left outside under trees on my seed raising table with daily watering. Some protection from heavy watering is probably necessary to avoid damage to the very small seedlings.

NEW SPECIES

The work of Dr S. James at UWA, and of Prof. Carlquist in the USA has resulted in a number of species being added to those listed by Erickson and by Grieve & Blackall.

S.confluens. (James) This is the so-called'Northern' form of S. crassifolium raised to specific rank on the basis of chromosome counts.

S. ecorne (James) This is S. calcaratum var. ecorne raised to specific rank on the basis of chromosome, morphology and reproductive discontinuity.

S. nonscandens (Carlquist) A new species, very close to S. scandens but the tips of the leaves do not curl. It occurs further north than S.scandens in sandy scrub.

S.expeditionis (Carlquist) A new species very close to S. caricifolium differing mainly in the growth of adventitious roots from the crown of an elongated stem.

S. ricae (Carlquist) This is S. macrocarpum var. planifolium raised to specific rank on the basis of morphological characteristics. The name honours Mrs Rica Erickson, whose surname is already taken in S. ericksonae, a tropical species.

I have copies of the original descriptions if anyone is interested (these were provided by Keith Alcock, thanks Keith)

There can be no doubt that chromosome counts and seed viability are the techniques that must be used in the future to differentiate between species and forms or varieties.

I have had very little contact with the group members in recent months, I hope it's because everyone is happy with things as they are and not because they've given up. Or maybe you are all as busy as I am. Anyhow(!) if you're not happy, I can't do anything about it if I don't know about it.

My season has been fair, with some losses, and the biggest problem has been wind. Most species in the wild have some protection from wind, but free air circulation is still allowed.

NEW MEMBERS

Richard Davison
Stylidium Study Group Leader.