S.G.A.P. ACACIA STUDY GROUP
NEWSLETTER
AUGUST 1964

A C Keane
544 Brunswick St
North Fitzroy

Germination of Hard Coated Seeds (Part 2)

From our reports, results are as follows:-

1. Bush fire method. No.
2. Planting of seeds without previous treatment. No.
3. Mr Tucker's method. Poor results.
   Mr Tucker has since told me he has not had the same good results as first reported and does not now recommend the method.
4. Treating with boiling water or cutting the seed.
   There appears to be little difference in the results of a reasonable number of experiments. The average is 45% for boiling water and 43% for cutting. This is probably reasonably good as an average but not quite satisfactory as a method or methods. The trouble is that the percentages mentioned are averages only of course, and unless you use a large number of seeds, there will be quite a number of occasions on which perhaps only two or three out of say 20 will germinate. I believe that under the right conditions, if we can find them, one should get better results.
5. The Vermiculite treatment described by Mr Holliday and Mr Payne and their results obtained were so impressive that we should go further into the matter. You will recall that my experiments were not so good. Looking back and now knowing Vermiculite a little better and particularly its water holding capacity, I realized I used too much water on the medium. If it looked dry, which was nearly always, I applied water, giving probably a continuous liquid saturation. The strike was not only poor but most seedlings died after transplanting which I carried out shortly after their appearance. They were planted in half sun which didn't help with all the wet. The results of the successful planters were obviously a matter of technique and I wrote to these gentlemen asking for details.

Here is **Mr Holliday's** reply:-
"Use a terra cotta pot, no larger than 4 to 5 inches and fill with Vermiculite. Thoroughly wet and squeeze down in the pot, then top up with Vermiculite and wet again. The Vermiculite medium should be dense enough once wet to pretty well maintain its level in the pot, otherwise seeds tend to wash well down. Once this is established I carefully firm the seeds in the top surface of the Vermiculite, and cover with a light coating of clean porous gravel (one-eighth of an inch and less screenings). The pots are placed on a covered terrace facing north where they receive some morning sun and daylight throughout the day. Vermiculite retains moisture so well that often germination occurs without watering becoming necessary depending on weather conditions. In any case, an examination every two to three days determines whether I water or not. Watering is done by immersing the whole pot in a bucket of water. Warmth is certainly necessary. I find October-November good months for seed sowing. Germination is poor once the weather turns cold.

Regarding the transplanting of seedlings, I have never liked the method of pricking out young soft seedlings. I grow them on until thoroughly hardened sometimes 3 to 4 inches high but usually less and then shake all the roots free of soil and transplant individually into a permanent container, usually a tin containing good potting soil. I always wait for a cold wet spell to do this and stand the plants out in the rain. The fact that your transplanted seedlings died is probably nothing to do with using Vermiculite. I think all amateurs and professionals alike have batches which fail when transplanted usually due to some soil fungus or such like which will cause the plants to fail at certain times and not others."

He adds:- "These seeds you sent me for testing – both germinated perfectly. (I used 10 seeds of each). *A. extensa* grew on satisfactorily, ready for transplanting but *A. filifolia* did not. This species was very slow and several died altogether. With other species I have repotted some in Vermiculite as well as potting soil and compared rate of growth. Certain species seemed to grow more sturdily in the Vermiculite than in the soil. Other native plant growers here in South Australia make these claims also. (Not necessarily with acacias)."

I can help reference *A. filifolia* although I can get no details of its place of origin etc. I planted one grown from seed September 1962 in a large plastic dustbin. It grew well and last March when 2ft high I transplanted into a well drained position. It is now 2ft 6ins high and in full flower. The blooms are medium sized fluffy balls, pale yellow and fairly profuse. It is a small argument in favour of my contention that the hard to start species can have their beginnings in tubs. The dust bin was cut down on one side and then wired together again for further use. I no longer feel that such a large container is necessary and use now small plastic buckets ten inches deep – these will readily support seedlings until 1 ft high, when they should transplant more easily than they would from the larger bin.

Recently at the Nursery of a most competent gardener at Croydon I noticed a dozen or so seedlings growing in half kerosene tins. When I asked why, he told me he had heard of a gardener in one of the seaside suburbs of Melbourne (in the sand belt area) who was successfully growing banksias, starting them by this method and having a profitable time selling the spikes. Now I have been told by one interested in banksias and who lives in this district that he cannot grow most of these by any usual method and he is a very knowledgeable craftsman – this is of deep interest and I would like you all to try out the idea, but only with the acacias apparently unsuitable to your area.

Miss Pearce has a very varied collection of seeds and will be glad to supply you on request.

As we now have full instructions for the Vermiculite method, may I suggest each try out say six different types of the lesser known species in a 4 inch pot, pot next October and let us have a report. To get a reasonable average, use at least 10 seeds for each experiment.

Mr O'Dwyer has offered to put some time into this trial and between all of us we should have a large and interesting number of results. I particularly ask for your co-operation in this.

Memo, for Mr Scott Young: You have been good enough to offer to investigate the acacias in regard to their regional distribution. Any observations you can supply on this will be appreciated.

Our latest member is Mr Clive Fisher of Armours Rd, Warragul, Vic. He is interested in growing any Australian plants with a special interest in acacias.

Miss M Pearce of "Dunolly", Warne St, Katoomba, NSW, has agreed to act as curator of the seed bank. She will be grateful for any seeds of any acacias and promised to organize some of her fellow gardeners to collect seeds for the bank.

I hope all will follow suit and give her every help.

Thank you, Mr Tucker for an abundance of *A. deanii* seeds. And you, Mr Holliday, for Vermiculite and seeds of *A. accola* which arrived safely. I think I owe you something. Kindly let me know the amount.

Subscriptions 7/6d for the current year are now due. I do trust that those who did not pay last year will catch up.

Mons. Lapostolle: Your remittance received. Many thanks.

A C Keane