

Dear Members,

Welcome to new members:

Mrs. Beverley O'Keefe, "Wallalee", Springsure, Qld. 4722
 Mrs. C.N. Wadey, 8 Sherbrooke St., North Eltham, Vic.3095
 David Fitzgerald, 63 Kintore Ave., Prospect, S.A. 5082
 Vic. Region S.G.A.P., 4 Homebush Cresc., Hawthorn, Vic. 3123

and to those who have rejoined after a spell :

Brian Lacy, P.O. Box 81, Dunkeld, Vic. 3294
 Ross McDonald, P.O. Box 9, Upper Ferntree Gully, Vic. 3156
 Hugh Stacy, 16 Booyong Ave., Lugarno, N.S.W. 2210

Two New Addresses:

Philip Moore, 20 Moores Rd., Glenorie, N.S.W. 2157
 Gary Hearnnes, 9 Hildegard Court, East Kilsyth, Vic. 3137

Our thanks to the Hakea, Eucalypt and Styliidium Study Group Leaders for their exchange newsletters which always contain much interesting information.

Philip Moore has forwarded the following information on fungicides which I am sure you will find of interest: "As a preface the toxicity of pesticides is measured by the LD50 rating. This rating is the lethal dose which causes the death of 50% of a test cage of animals. It is expressed in milligrams of pesticide per kg of bodyweight. This is the way it is graded.

<u>GRADING</u>	<u>LD50 ORAL</u>	<u>LD50 DERMAL</u>
Extremely hazardous	5 or less	10 or less
Highly "	5 - 50	10 - 100
Moderately "	50 - 500	100 - 1000
Slightly "	Over 500	Over 1000

The above figures are in mg/kg.

The LD50 (oral) of Terrazote is 2000

It is interesting to note the LD50 for some commonly available pesticides:

Baygon	80	(oral)
Derris Dust	132	(oral)
Rogor	215	(oral)
Pyrethrin	1500	(oral)

Although Terrazote has a low toxicity for warm blooded animals, it is toxic to fish and should be kept out of dams and streams. It may also cause some dermal irritation in humans. Another fact to note is that liquid preparations (which Terrazote is) have four times less toxicity. Here are some properties of Terrazote:

1. It is aerative preventative.
2. It is long lasting - in pots 1-2 months
in tubes 2-3 months
3. It acts against these fungi - Pythium, Phytophthora, Rhizoctonia and Fusarium.

These fungi are responsible for pre-emergence and post-emergence damping off, wire stem, root stem rot etc.

This information was gleaned from the Ryde School of Horticulture course.

Activity on the seed bank front has been very quiet; in fact, all correspondence has fallen off since December. I hope that a resurgence of interest will occur now that summer (officially, that is) is over.

REPORTS: It is time again for annual reports and I look forward to receiving them. The appropriate sheet is included. Would you please list the species in alphabetical order to make it easier for me to enter them in our records. Should you need more space, please follow the headings on a plain sheet of paper.

SEED BANK: We have received seed from members and several non-members and I would like to thank:

Paul Brown, Beverley O'Keefe, Val Hando (Qld) and Bernie Dixon (Hibbertia Study Group leader).

ADDITIONS

- | | |
|----------------|----------------|
| A. angusta | A. mangium |
| aprepta | ramulosa |
| lauta | shuttleworthii |
| loroloba | torulosa |
| lycopodiifolia | |

MEMBERS' NOTES:

A. leptoloba is considered by several Queensland members to be a very worthwhile plant in their gardens. Paul Brown comments as follows:

'Spectacular flowering habit. Tree changes from bud to full bloom about 11 p.m. at night. Nearly all trees in Townsville flower on the same night - 4 or 5 flowerings per annum; flowers last only 2-3 days. Our original tree snapped at ground level in high winds in January 1980 and has re-grown and flowered again in October 1981.'

This Acacia was mentioned in Newsletter 32 of November 1980 and a member reports that it is being grown in Brisbane. Has anyone else tried it yet? Seed is available from the seed bank.

Inez Armitage is pleased with the results of germinating Acacia seeds in egg cartons. She reports: 'I've germinated over the past few week (Nov.) 45 species of wattles - some good germination, others bad. I've done them all in eggcartons, in quantities of 4 to 7 It is surprising the numbers which put out the radicle in a healthy determined fashion and after transfer to prop. pots don't produce anything more'. Inez feels that some of her problem with rotting is caused by keepings things too wet.

Tony Scalzo also recommends the egg carton method. He writes - 'I have had a good deal of success with the following propagation regime: Pretreatment of seeds by nicking of testa, followed by overnight soaking in cold water - followed by pre-germination in egg cartons. Individual germinated plants are then potted into separate 4 cm dia. x 6 cm deep plastic pots. The potting mixture consists of 2 parts Austraflo "Space" 2 parts coarse gravel, 1 part vermiculite, plus a small amount of Osmocote. All plants now potted up into 20 cm (8") pots.'

George Althofer reports that he has had considerable success with growing some of the small W.A. Acacias from cuttings. Also at the Burrendong nursery the eastern species A. aculeatissima and W.A. A. moirii have been grown very successfully from cuttings.

As a trial Harry Infield planted Acacia seed after water treatment directly into 20 cm perforated-side poly tubes as used by N.S.W. Forestry Commission. 'The medium used was a mix of 90% washed river gravel and 10% matured sawdust, with about four pellets of poultry humus and blood and bone mixture placed half way down the tube to give some quick and also lasting nutrient. This is placed half way down so that if the bottom section of the medium falls from the tube as some time it does, it is most likely that the nutrient will remain.'

Ruth and Harry have planted an impressive number of Acacias (amongst other species) on their property at Coomba Park, N.S.W. which they are

3.
developing as a 'Minor Arboretum of Australian Plants'. Harry reports that they have created an acacia bordered roundabout at the entrance of the property. This should cause many comments when it matures and flowers.

John Lee has reported on several of the Acacias in his garden - Acacia o'shanesii deserves a mention. It is not a species that produces a flush of flower but one that is liable to have blossom almost throughout the year. This season it has been somewhat inspired and has been fairly heavily in bloom throughout December and January and is still carrying blossom (early Feb.). The nature of the tree with its straight trunk and horizontal branches bearing feathery foliage - in fact the branches tend to be pendulous.' As we do not have seed of this one, John is going to collect some.

Rhonda Schipp of Wagga Wagga has found that A. polybotrya stands pruning very well; in fact it gives it a new lease of life. On the other hand she found that A. adunca was just the opposite; it produced no regrowth at all after pruning.

SEED BANK

The question of accuracy of the names of seeds in the seed bank has risen once more and I am sure it will again as members learn more about their Acacias. This question has concerned me for some time.

In this instance, A. pubescens seed was supplied to Inez Armitage in 1979. The results have been confirmed as A. cardiophylla and a cross of some sort. These seeds were part of a collection from our garden. Now I am quite ready to admit that a mix up of seed could have occurred, and this may explain the absence of A. pubescens seed in the mix. We have both Acacias in the garden.

What I am interested in particularly is the hybridisation of species in gardens and the subsequent lack of purity of the seed that is distributed by the seed bank. We are aware that A. cardiophylla, for instance, has hybridised with A. dealbata in our garden and this no doubt explains the mixed results that Inez has achieved. The offending seed has been removed from the seed bank and destroyed.

I think that this example emphasises the need for collections of seed from garden-grown plants to be labelled as such. As well, I would appreciate prompt notification of any doubt that anyone may have regarding accuracy of any seed we distribute from the seed bank. I don't think any of us can assume that all seed is named correctly. Your co-operation would be appreciated.

FINANCE

My thanks to those members who have forwarded subscriptions in advance. I feel, though, that our funds are more than adequate at the moment and that there is no need to call for subscriptions yet.

During the S.G.A.P. seminar/conference in December, a member told me that she had been successful in germinating Acacia seed by first collecting it while it was still green, then sowing it without pre-treatment, in the usual way.

In Australian Natural History journal, Vol. 2 No. 7, 1981, in an article on "Our Phoenix Flora", Ross Bradstock, a post-graduate student at University of Sydney, discusses the part bush-fires play in the survival of our flora. He mentions that species survive and reproduce under a whole range of different types of burning and that some species

with no obvious adaptation or resistance to fire are actually dependent on it for long term survival.

He discusses many aspects of burning, the effects of very hot fires and light burns, their frequency, the response of different genera, the reaction of seeds that are held on the plant and of those which are dropped and held in store on the ground and the life history patterns.

I have extracted one comment on Acacia suaveolens which is of particular interest to us.

Acacia suaveolens which lives for about 15 years, usually sheds its seeds and stores them in the soil. Germination is best after hot fires; very cool burns do not seem to generate enough heat to germinate many of the seeds. This leaves a population of seeds stored in the ground. The longevity of these seeds in unknown but burns in 30 year old vegetation have resulted in fresh germination of A. suaveolens although the species had apparently been absent for many years.

As this Acacia usually flowers in the second autumn after germination, it is considered that this plant may be able to tolerate a high fire frequency of as little as a 5 year cycle. More frequent fires could destroy the underground store of seed before enough time had elapsed for development of new plants and new seeds.

It was interesting to note that Blackwood (A. melanoxydon) follows the same pattern but is considered to live approximately 50 years, with its seeds remaining viable for 500 years, (or should it read 50 years ?)

A few notes extracted from Tony Cavanagh's talk on germination of Acacias which was given at the S.G.A.P. seminar in December.

It was known that several Acacias were grown in Europe prior to 1800. The first to flower in England in 1790 was A. verticillata. It is interesting to note that most cultivation notes of the time mention growing Acacias from cuttings, although some species proved difficult to propagate vegetatively.

To pass quickly to today, it has been noted that some Australian Acacias (e.g. A. dunnii and A. cuthbertsonii) especially from northern and Western Australia and desert areas have exceptionally thick seed coats and need quite severe treatment (e.g. long term boiling) to encourage them to germinate. Opposed to this other species such as A. aneura (mulga) and A. dictyophleba have relatively thin coats. It is not known why these differences exist, there does not appear to be any connection between locality (or environment) and the thickness of the seed coat.

Here again we find the suggestion that we should collect Acacia seeds while they are still green and sow them without further treatment. It is suggested that the best time to collect them would be when the pods are just starting to turn brown.

I look forward to receiving reports of trials with this method. Please keep careful notes on which species you try.

Marion Simmons