S.G.A.P. ACACIA STUDY GROUP NEWSLETTER NO. 47 MARCH 1986

Dear Members

Welcome to the following new members who have joined us since October. They are:

Bill Venables, 4 Cooke Tce, Athelstone 5076 Ian Evans, PO Box 60, Eaglehawk 3556 Morton Kavaney, Eureka Rd, Rosebank 2480 Philip Totten, 21 Ophir St, Orange 2800

SEED BANK

For those who sent seed for the seed bank, thank you. We have a wonderful variety of seed available which I feel is not used enough. There are seeds of many small interesting species, as well as larger ones available for any garden situation. Please make use of them.

Additions	Deletions
A. attenuata	A. acellerata
A. aulacocarpa var fruticosa	A. araneosa
A. fasciculifera	A. frigescens
A. holotricha	A. gracilifolia
A. pataczekii	A. kettlewelliae
	A. pravifolia

Please remember to mark any seed packets which you send with whether it is garden or bush collected, locality and date.

Recently I have received several requests for seeds without the required stamped addressed envelope. Please make sure that you remember to include it.

NEWSLETTERS

I would like to acknowledge with thanks the receipt of newsletters from:

Birds & Native Plants Study Group Dodonaea Study Group Brachysema/Helipterum Study Group Eucalyptus Study Group Melaleuca Study Group Victoria, Queensland & New South Wales Regions

MEMBERS' NOTES

A letter from **Thomas Ross** of West Germany tells of winter conditions he has recently experienced. Mild in December and January but dropping below freezing and mostly staying there for a month. The lowest temperature in the most favoured part of his garden was -12.5°C. He says that "most of my wattles outside have been cut to the ground or killed, but one of your *A. pataczekii* survived -14°C. It was protected by dead leaves and lost only the branches protruding from the cover." In his green house *A. boormanii* was flowering beautifully and *A. vestita* was in bud at the time of writing.

Frank Prichard has a good selection of Acacias grown from our seed ready for planting at Galore Hill when suitable autumn rains fall. Using fresh *A. suaveolens* seed collected from Galore Hill Frank conducted a seed sowing trial. He found that the best of five potting mediums was a mix of 3 parts medium sand and 1 part peat moss (New Zealand). The sand was thoroughly washed before use and with the medium sand all the fine and coarsest particles were graded out.

The seeds were subjected to four different treatments:

- 1. End of seed scarified and covered with boiling water
- 2. End of seed scarified and covered with hot water
- 3. End of seed scarified but not soaked
- 4. Not scarified and covered with hot water.

The best results were from treatment 4 followed closely by 3. The worst results were from 1 - many of the seeds rotted.

This trial was conducted between 16/2/86 and 8/3/86. It would be interesting to try it again, say, in spring and also with other species.

Arnold Sandell from Tamborine Qld has been experiencing many losses of his small nursery plants. He is at a loss to know exactly what is causing the problem – the weather, over-watering, under-watering or soil problems. I guess it is necessary to conduct trials with different potting mixes, different rates of watering – but what can you do about the weather?

David Fitzgerald of SA has written to tell of some of his Acacia experiences; he writes of the Tasmanian endemic *A. pataczekii* which has blue-green phyllodes with purplish new tips and still looks good while other have succumbed to what David feels is bad drainage and too much winter rain. *A. glaucocarpa* too is doing very well, it is about 1 year old and 3m tall. *A. fauntleroyi* was flowering when he wrote in January, a particularly fine sight.

He has lost *A. bivenosa*, *A. cyclops* and *A. cana*. *A. aculeatissima* sounded as though it would not survive.

Fred Rogers of Horsham area has written of his *A. redolens* (WA) which thrives under dry conditions. The plants are 6-7m wide and about 1m high. *A. muelleriana* suffered from a very wet season followed by frosts and a dry period. Now suckers have come up over a wide area making quite a thicket.

A. rhetinocarpa was attracting many bees when Fred wrote in February. *A. dealbata* (which is very common in Tasmania) was not successful and was almost dead after about 5 years.

A letter from **Helen Bizzal** of SA reports that seed bank seed supposedly *A. wilhelmiana* has turned out to be anything but that. The phyllode sample which she has sent is green flat curved lanceolate 6cm x 8mm with a mid vein. Has anyone else grown this so called *A. wilhelmiana* seed? Please let me know if you have.

GROWING ACACIAS IN POTS FOR DISPLAY

Plants in pots are often needed for display or show purposes or as part of educational programs. There are a number of Acacias which lend themselves very well for this purpose.

There are several points which need to be considered first of all. The time of year when the plants will be displayed. It will be necessary to plan to grow from seed two or three years ahead and maybe longer with the longer lived species.

Choose carefully the species that will flower when you need them at their best.

The **potting mix** may be your own using a well drained gravel/soil mix (80%/20%) or a good quality native plant mix without added fertiliser.

The **container** which will ultimately be used for showing. Plastic is best as it is lighter in weight and does not dry out as quickly as do terra cotta pots. Start with a small pot and as the plant grows repot into a slightly larger one. Do not put a small plant into a large pot.

Fertiliser will be needed in spring – slow release pellets suitable for native plants or straight blood and bone (no additives) may be used.

Watering is most important and great care needs to be taken not to over water. At the same time the pots should never be allowed to dry out. When the plant has advanced to a larger container it may be advisable to insert a narrow piece of plastic pipe into the soil near the centre before placing the plant in the larger pot. This will enable water to be dripped in and so ensure that the soil in the centre is thoroughly watered.

Pruning. To produce a really good pot plant it is necessary to prune carefully and regularly. Tip pruning as the plant grows will keep it bushy and sturdy. Pruning after flowering will encourage a flush of new growth.

Labelling is important too. Provide a label that can be read easily without the viewer having to bend or twist.

If you are unable to produce a plant in flower at the time of display a colour print often can be used to add interest.

Plants on display need to be in good condition and without damage or disease and the soil in the container should be free of weeds.

Some acacias suitable for container growing:

A. aculeatissima	A. handonis
A. alata	A. lanuginosa
A. brownei	A. luteola
A. brunioides	A. mitchellii
A. chinchillensis	A. mooreana
A. cometes	A. pulchella
A. drummondii	A. restiacea
A. echinula	A. rhetinocarpa
A. ericifolia	A. spinescens
A. flexifolia	A. truncata
A. glaucoptera	A. teretifolia
A. guinetii	A. trigonophylla

SUBSCRIPTIONS

Thank you for the subscriptions paid. These are dated back to 30th June 1985 as laid down by the Brisbane Conference. I am afraid that this newsletter will be the last to be sent to those who find a red cross adorning their newsletter, unless their subs are paid.

SLIDE LIBRARY

Thank you to Frank Berner for slides donated to the collection. This brings the number donated to about 80 slides of 47 species. These are:

A. adunca (3)	A. hilliana	A. notabilis (3)
<i>A. alata</i> (2)	A. holosericea (2)	A. omalophylla
A. alpina (2)	A. implexa (2)	A. o'shanesii
A. aulacocarpa	A. imbricata (3)	A. pubescens
A. bancroftii	A. julifera	A. retivenia
A. chisholmii	A. juncifolia (2)	A. rotundifolia (2)
A. complanata (3)	A. latisepala	A. salicina
A. continua	A. leichardtii	A. shirleyi
A. crassa (2)	A. leiocalyx (3)	A. stipuligera (7)
A. cretata (2)	A. leptocarpa (2)	A. sutherlandii (3)
A. decora	A. leptoloba	A. triptera
A. denticulosa	A. leptostachya	A. ulicifolia
A. dictyophleba (3)	A. lineata (2)	A. nucifera
A. farnesiana	A. macradenia	A. venulosa
A. flavescens (2)	A. melanoxylon (2)	A. victoriae (3)
A. galioides (2)	A. neriifolia	

We will be happy to receive any spare slides you might care to forward which supplement those we have already. Once we have completed a written description and perhaps a cassette description the slide collection will be available on loan to any Acacia Study Group members for one month. The only cost will be postage costs.

ACACIA AND THE FUTURE

Mr Les Pedley, Deputy Director of Queensland Herbarium presented the A. J. Swaby address to SGAP Brisbane Seminar on October 1985. What he had to say caused a great deal of comment. You may have heard of the changes that he would like to initiate with the classification of Acacia.

At present the classification system is based on George Bentham's work which was published in 1875. Of course it had flaws and one which Mr Pedley mentioned was that "Bentham failed to appreciate that the Australian bipinnate species (Botrycephalae) are more closely related to the Australian phyllodinous species than they are to other American, African and Asian species such as *A. nilotica* and *A. farnesiana*".

Over the years international botanists have made changes to the system but overall few of them were accepted generally. In more recent times much research has been undertaken into such things as pollen, seeds, seedlings, heartwoods and cyanogenic properties of Acacia.

As a result of many years study Mr Pedley has proposed for consideration by Australian fellow botanists and others the recognition of three genera as follows:

- 1. Acacia
- 2. Senegalia
- 3. Racosperma

He proposed that the name Acacia cover only those trees and shrubs with bipinnate leaves and stipular spines. In Australia this would involve only a few species eg *A. bidwillii* and *A. sutherlandii*.

Senegalia was to cover those trees, shrubs or lianes with bipinnate leaves and prickles or if no glands then without prickles. Two Australian species from Cape York Peninsula were involved here.

Racosperma was to cover Australian trees or shrubs with phyllodes and only rarely armed, or with bipinnate leaves with glands and never prickles. Some of these species are found also in the Pacific and Indian Ocean areas.

The name Racosperma was first validly published in 1835 by Martius when describing acacias growing in the Monaco Botanic Gardens.

Should the proposed changes to the worldwide classification system be accepted the costs and inconvenience would be enormous and would affect many institutions and many people eg botanists, both professional and amateur, horticulturists, foresters and others. No doubt these points will be considered and the final decision made over a period of time by people who are well qualified to make it.

BOOKS: Gardener's Guide to Australian Plants, Gwen Elliot

Step by step guide to starting a new garden -70 colour photographs, nearly 500 plant descriptions, including 42 acacias. (\$24.95)

BIRDS AS POLLINATORS OF ACACIA

Have you noticed any birds pollinating acacias in your area? It has been reported that this occurs with some species, especially *Acacia terminalis*. Please take particular note from now on and report your results on this important point.

Marion Simmons PO Box 1148, Legana 7251

ACACIA STUDY GROUP NOTES

Spreading tree to about 10m; bark fissured; phyllodes curved 5-A. oraria 10cm x 40-45mm, 3 longitudinal nerves more prominent; flowers O. Timor yellow, globular, racemes; pods twisted and coiled. Tropical. Shrub or small tree 2-4m tall; phyllodes needle-like 5-11cm long; A. orthocarpa flowers spikes in pairs Aug – Mar; pods woody striated; WA, NT, Q widespread tropical areas. Tree to 15m tall; leaves dark green bipinnate; flowers pale lemon-A. oshanesii vellow globular, throughout year. Occurs in high rainfall coastal O. NSW areas, often along watercourses. Bushy shrub to small tree to 5m tall; narrow rigid lanceolate A. oswaldii phyllodes 3-8cm x 3-15mm; flowers pale yellow globular, Oct – WA, NT, SA, Q, NSW, VIC Jan. Pods dark brown, woody sl. coiled long. A. oxycedrus Prickly shrub to small tree 2-10m; short spiny stipules; phyllodes 2-4cm x 2-5mm with sharp point, crowded; flowers bright yellow VIC, NSW spikes, July -Oct. Hardy shrub for wide range. Bushy heath-like shrub 1-1.2m tall, branches ending with thorns; A. oxyclada phyllodes linear crowded to about 1cm long; flowers bright yellow, WA globular to ovoid, spring; found in sandy soils north of Perth. Growing satisfactorily in northern Tasmania. Shrub 1-4m; phyllodes linear brittle 9-13cm, recurved tip; flowers A. pachyacra WA, NT, SA bright yellow globular on short racemes, Aug-Oct. Pods sticky, seeds transverse. Inland species hot climates. Western Myall (once called A. sowdenii). Shrub or tree to 9m tall, A. papyrocarpa dense umbrella like crowns; bark rough; phyllodes linear, silvery-WA, SA green, tip recurved; flowers small yellow in reduced racemes or cluster, Aug - Nov. Dry inland species. Bushy green prickly shrub, 2-5m tall. Phyllodes green, wavy-A. paradoxa WA, SA, NSW, Q edged 1-3cm x 2-8mm mid nerve, sharp stipules at base; flowers large bright yellow balls, Aug - Sep. Pods hairy. Hardy, tolerant of many conditions; considered pest in some areas. Shrub or small tree 2-10m similar to A. mearnsii. Bark smooth, A. parramattensis voung shoots golden; bipinnate leaves; flowers vellow globular in NSW racemes, Dec -Feb. Pods dark brown/black. Fast growing, found on central coast and Tablelands; common in Blue Mountains. A. parvipinnula Mostly tree to 10m, closely related to A. filicifolia. Silvery smooth trunk; young tips white or yellow; leaves bipinnate; pale yellow NSW flowers in racemes, Sept-Dec. Leathery pods, blue-brown to blueblack, constricted.

A. pellita	Shrub or small tree to 4m; branchlets acutely angled hairy;
Across top	phyllodes hairy 10-14cm x 4-9cm with long stalk, flowers bright yellow spikes, May – July; pods coiled, velvety. Suitable for transactional areas only.
1 nondula	Wooning Muoll Silvery nondulous tree to 10,15m; phyllodes
Q, NSW, VIC	blue-green, linear-lance-shaped, 3 main veins, 6-9cm long; flowers globular in short racemes, May-July. Pods flat winged. Hardy long lived for inland warm areas.
A. penninervis	Hickory Wattle. Extremely variable shrub or tree 2-8m phyllodes
Q, NSW, VIC	broadest near middle, 4-10cm x 7-30mm marginal gland connected to mid nerve by nerve, usually. Flowers pale yellow balls in racemes, Nov-Feb. Hardy, grows in Tasmania.
A. pentadenia	Karri Wattle. Tall shrub to small tree 2-5m, smooth bark;
sw WA	bipinnate green leaves; flowers globular pale yellow in short racemes or clusters, Sep – Dec. Hardy, grows well in Tasmania.
A. perangusta	Bushy shrub or small tree to 6m; branchlets reddish angular;
s Qld, n NSW	phyllodes hairless, linear, mid-nerve 3-9cm x 1.1-1.6mm; flowers pale yellow balls on branched racemes, Aug – Sep. Closely related to <i>A. fimbriat</i> a but has narrower, long hairless phyllodes. Adaptable, grows on river banks.
A. phlebocarpa	Spreading sticky flat-topped shrub to 1m Phyllodes narrow
across top	lance-shaped sticky, mostly hairy 2-4.5cm long; flowers bright yellow balls, May – July. Sticky pods. Suited to hot dry areas.
A. phlebopetala	Spindly or spreading shrub to about 1m. Phyllodes green
sw WA	triangular with sharp point; flowers cream balls, flowering intermittent. Needs sunny well drained conditions.
A. pilligaensis	Slender stemmed shrub to 2m tall; phyllodes linear 2-3cm x 1-
w NSW	1.5cm with curved point; flowers bright yellow balls singles or twins, spring. Needs warm well drained site.
A. pilosa	Usually prostrate leafy shrub or occasionally to 1m tall. Phyllodes
sw WA	elliptical, hairy, wavy edges; flowers cream balls on long stalks, Sep –Dec. Good ground cover, adaptable.
A. pinguifolia	Spreading dense light green shrub to 2m. Phyllodes ±round,
SA	fleshy, often curved; flowers bright yellow balls, July – Oct.
, .	Prefers neutral to alkaline soils and good drainage.
A. platycarpa	Shrub or trees to 5 (10)m, often in stands. Phyllodes variable but
across top	yellow balls in long racemes. Pods woody, veined, broad; tropical species, dry inland.
A. plectocarpa	Tall shrub to tree to 6m with angular branchlets. Phyllodes
nw WA	lanceolate curved, many nerved; flowers bright yellow spikes. Grows on river banks in tropics, needs similar conditions.
A. podalyriifolia	Mt Morgan Wattle. Shrub/tree to 5m; phyllodes blue-green
Q, NSW	usually hairy, elliptic; flowers large bright yellow balls in racemes, June – July; pods glaucous hairy. Commonly grown.
A. polifolia	Shrub to 3m; branchlets angular; young tips golden; phyllodes
central Q	hairy, narrow/oblong 5-7(9)cm x 5-10mm; flowers bright yellow balls in racemes, May –June. Hot, well drained.
A. polybotrya	Spreading shrub to 3m with bipinnate leaves; flowers bright yellow
NSW, Q	balls in long racemes, spring. Moderately frost and drought tolerant.

A. pravifolia	Small rigid shrub 1(2) m; branchlets hairy; phyllodes rigid,
SA, NSW, Q	triangular small flat, sharp pointed; flowers yellow balls singly in
	axils, July – Sept. Pods twisted. Requires open sunny well drained soils. Inland.
A. pravissima	Ovens Wattle. Large shrub or small tree 3-8m with arching or
VIC, NSW	spreading branches. Phyllodes triangular dull green; flowers bright
	yellow balls in racemes, Aug - Oct. Hardy, is grown widely in
	eastern and southern states.
A. prominens	Tall shrub or small tree 5-8m, Phyllodes grey-green oblong-elliptic
NSW	with conspicuous gland; flowers fragrant yellow balls in racemes,
	spring. Pods bluish straight flat. Adaptable, widely grown,
	successful in Tasmania.
A. pruinocarpa	Allied to A. notabilis. Shrub to small tree 3-10m with rough dark
WA, NT, SA	bark, often mallee like; phyllodes to 17cm long, blue-green,
	leathery; flowers bright yellow balls in false racemes; pods
	leathery flat, seeds transverse. Hot areas with good drainage.