

Dear Members,

I received a reasonable response to my request for more species to be grown and I thank those who participated, but I would still urge other members to try some different species as well. A comment has been made that members may be reluctant to try new species on which they do not hold sufficient information, so to help overcome this problem I have decided to work my way through the seed list giving a few details of each species, but omitting the most commonly grown ones.

 Welcome to new members who have joined us since July.

They are:

Chullora Public School, Waterloo Rd., Greenacre, N.S.W. 2190
 S.G.A.P. Geelong Group, Hon.Sec., 365 Ryrie St., Geelong, Vic. 3220
 Mrs. Margaret Kinsey, P.O. Box 545, Burnie, Tas. 7320

 I would like to acknowledge receipt of interesting exchange newsletters from the Brachyscome/Helipterum and the Eucalyptus Study Groups. Thank you.

SUBSCRIPTIONS are due. A large red cross on your newsletter means that unless your subscription is received this will be your last newsletter.

 Winter this year seems to have produced some of the heaviest and most damaging frosts seen in the Eastern States. Reports suggest that damage has been very widespread with many plants being badly damaged, if not killed. Continued dry to drought conditions are proving equally hard to handle. In Tasmania already we have a large number of municipalities declared officially as drought areas, which is most unusual for this island. Low or no winter or spring rainfall and drought in many areas of Australia is really going to test the plants this year. Your reports on the outcome will prove of interest to all.

MEMBERS' NOTES:

Neil Marriott from western Victoria has commented on pruning of Acacias. He says "our sheep paddock had been left stock free for about 3 years allowing considerable regeneration to take place. When sheep were put back in the first thing they went for were the wattles - even standing on their back legs to reach the upper branches. Within a week or so all Acacias were defoliated." The results when sheep were removed again were:

- A. genistifolia - regrew with vigour
- A. melanoxylon - shoots appeared from the base
- A. paradoxa - regrew with vigour
- A. pycnantha - no regrowth at all; once the foliage was removed the plants died. Plants with only lower foliage removed continued to grow in the upper part but made no more lower growth.

 Tony Scalzo of St. Albans (Melbourne) reports on propagation results. This year he propagated Acacias in February, April and July. In the summer trial he got very poor results with less than 50% germination with all species, whereas with the later trials the results were generally close to 100%. He used the 'egg carton' method described previously. Tony also tried sowing A. moirii ssp. dasycarpa seeds directly into his garden in a sandy spot and got 100% germination.

Once more Tony has found that some seed supplied from the seed bank has been incorrectly named. A. browniana has turned out to be probably A. varia var parviflora. This may not be the case with all A. browniana seed supplied as we have seeds from different sources, but I suggest that if your A. browniana plant has small cylindrical bright sulphur yellow flowers instead of pale ball flowers, then it is time to have it checked.

The subject of hybridisation of Acacias among garden specimens is one which is concerning Tony, especially as in his garden he is growing many of the Pulchellae group. He is concerned that if he collects seeds from his garden specimens, especially from plants belonging to closely related species or varieties, that the seed will not be 'genetically pure'.

This is a complicated question and must concern us all as many of us provide seed to the seed bank from garden grown plants believing them to be seed of plants as labelled. Because I do not know the answer, I am referring the matter to several authorities and hope to report further in a future newsletter.

At the same time I do feel that hybridisation does take place in the natural bush. We found several specimens in the Mt. Isa area which were apparently intermediates between two different species growing nearby. Perhaps it is the way nature produces new species.

SEED BANK: 504 packets of seeds have been issued in the last 12 months. A new seed list is included with this newsletter.

WRONGLY NAMED SEEDS - Again, if you have doubts of the identity of any Acacia you are growing from seed bank seed particularly, please advise or send me a small flowering and/or fruiting piece so that it can be checked. We must try to improve this side of the group's activities.

I would like to acknowledge a generous donation of seed from Tony Scalzo. As well, a friend from Chinchilla, Qld., Miss Grace Lithgow donated a large quantity of seed from her area and seed has been received from Bernie Dixon, Hibbertia Study Group leader, and I would like to thank them all.

We still need seed of :

A. acellerata	A. pritzeliana
adunca	ramosissima
beauverdiana	sedifolia
bidentata	spathulifolia
calyculata	wardellii
cyperophylla	
latipes	

The majority of these are W.A. species and our W.A. members are few, so unless other members are growing some of them they will remain unprocurable, I am afraid.

GERMINATION OF SEED

A comment from Tony Cavanagh of Dryandra Study Group regarding Mrs. Inez Armitage's query on germination of A. bidwillii seed. He "has germinated this successfully using hot (not boiling) water (say 90-95°C) and soaking for 30 minutes or so. Though they have quite a thick seed coat, the coat at the 'strophiole' (lens) of the seed is quite thin and generally peels off thus allowing the seed to take up water." He "found that one batch of seed was quite permeable without any treatment and subsequently found the seeds had been collected off the ground where again the strophiole had suffered damage." As a result of this experience Tony now uses the following method on all hard seeds. "Pour warm water over them and allow to stand for 24-36 hours. Seeds which remain floating

are discarded while seeds which swell within 36 hours are removed and planted. Seeds which remain unswollen are treated conventionally (with hotwater, microwave oven, nicking etc.)."

ACACIAS IN PUBLIC PLANTINGS

I have had no information at all from members regarding information on Acacias being grown in public places in their towns or along road-sides etc. Government authorities in Tasmania responded in most cases and from Victoria I had a reply from the Department of Aviation only. At Melbourne Airport they planted 18 species in all (most of the commonly grown species) and they consider the "plantings are successful although most of them are to be replaced after a period of 2 years because they die." I wonder what is wrong there.

I have not written to authorities in other States as yet.

DISTRIBUTION OF ACACIA IN AUSTRALIA - (W.A. Herbarium Research Notes No. 6, January 1982)

Here is a practical way in which members can help with the collection of accurate information of natural occurrences of our Acacias.

Mr. Bruce Maslin, Botanist at the W.A. Herbarium has asked any member of our group who is willing to make a study of the Acacias growing naturally in their particular area to contact him. As Bruce says - "it will only be through the help of interested people such as the members of your Group that the second edition of maps will be more complete and accurate."

The maps published in the above Journal are a series of distribution maps divided into grid cells for all known Acacia species in Australia, plus lists of Acacias found in each grid cell.

The address: Mr. B.R. Maslin,
W.A. Herbarium,
George Street,
SOUTH PERTH...W.A. 6151

NATIVE PLANTS USED FOR DYEING

A display by a Spinners and Weavers group at the S.G.A.P. Wildflower Exhibition in Hobart recently brought home to me the important part Australian plants play as a source of material for dyeing. Although no Acacias were used as dye plants in that display, further reading on the subject brought to light the fact that there are some species which are used.

The Handweavers and Spinners Guild of Victoria in their book "Dyemaking with Australian Flora", Rigby, 1974 lists the following plants:

Acacia aneura (mulga) dried leaves and twigs
baileyana (Cootamundra) flowers, stems, leaves, seed pods
cultriformis (Knife-leaf wattle) leaves, flowers
concurrans (was cunninghamii) (Curracabah or Motherumbung) leaves, flowers
dealbata (Silver wattle) leaves
decurrans (Queen or Early Black wattle) leaves
elata (Cedar wattle) leaves, flowers
harpophylla (Brigalow) leaves
implexa (Hickory or Lightwood) leaves
longifolia (Sydney Golden wattle) leaves
mearnsii (Black wattle) leaves, flowers, seed pods, bark
melanoxylon (Blackwood) leaves

Acacia podalyriifolia (Mt.Morgan or Old.Silver wattle) flowers, seed pods
pravissima (Ovens wattle) leaves
prominens (Golden Rain or Gosford wattle) leaves
pycnantha (Golden wattle) leaves
retinodes (Wirilda) leaves
saligna (Golden Wreath wattle) leaves
spectabilis (Mudgee wattle) leaves

Acacias can be mordanted to produce many different shades of yellow and gold. I am pleased to note that the Guild stresses that members at all times observe the laws governing the protection of native plants and assures readers that materials gathered for experiments during the preparation of the book were made from private properties with permission of the owners or from "garden grown natives".

GLANDS ON ACACIAS

Have you ever wondered what part the glands play in the life of an Acacia ?

Glands or extra-floral nectaries as they are more correctly called, have been examined closely over the years and precise measurements and details of their construction have been published. Three types of glands have been identified to date (1) porate - a gland with a central cavity and an external pore, (2) non-porate, one with no central cavity or outer pore and (3) a flat type.

Glands can occur on the upper surface of the petiole (leaf stalk), rachis (main leaf stalk) or both of them in the bipinnate species. In the phyllodinous group a gland is found most commonly on the upper margin near the pulvinis (leaf stalk) but there are some species where several glands appear along the top margin and in a few species a small gland may be found under the phyllode tip.

Perhaps to us the gland's greatest importance is as a means of identification, although the position in some species is so variable that it is not possible to use it conclusively. With other species the position is consistent and with other features can be treated as a reliable guide.

In the latest study I have seen (V.H.Broughton in Australian Journal of Botany, 1981) 43 species had been collected and examined in the laboratory and field, but at no time were drops of nectar seen on the plants.

Sooty mould seen on the glands indicated the presence of a sugary substance, but it was thought possible that the dryness of the atmosphere (especially in the Queensland collection area) would have evaporated any secretion before a drop became visible.

Foraging insects like ants were not seen by the collectors, although the presence of a few ladybirds was noted. One writer reported having seen ants on the glands of Acacia aneura and another mentioned birds were seen visiting A. pycnantha and A. celastrifolia.

Have you ever noticed any insect or bird working at the gland of an Acacia ? Could you take special note in future and report your findings ?

ACACIA DEALBATA. In Tasmania, Silver wattle has been the subject of a massive attack by plagues of grubs called "wattle fire blight beetle grubs". These 1 cm long green grubs have stripped the foliage off the trees, leaving them looking gray and dead. It is thought some may recover but a continued dry spring and summer would lessen the chances of survival of many.

Until recently A. dealbata was not considered of commercial value, but now it is harvested by wood chippers, used by builders for feature walls and furniture and by boat builders.

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