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ASSOCIATION OF SOCIETIES FOR GROWING AUSTRALIAN PLANTS

ACACIA STUDY GROUP NEWSLETTER No. 75

SEPTEMBER - DECEMBER 1995

Dear Members

Well here it is! The 100th newsletter of the Acacia Study Group has taken 35 years to reach. I had hoped to have it out in September but got involved in mounting a display for the ASGAP Conference and producing a booklet, "Wattles Are Golden", of selections from the 100 Acacia Study Group newsletters. (See below.) Since then I have been on holidays, been busy marking for the local university (this helps my finances to afford plants, film, books etc.) and catching up in the garden. I found it disappointing that despite my appeal for material to make this a special effort there was no responce from members, so this is just another oridinary run of the mill newsletter.

Early N/Ls were issued about quarterly and more recently (with a few exceptions) three times a year. There were a number of long gaps between the appointment of some leaders when the group was effectively in recess. Leaders over the years and their newsletters have been:

LEADERS OF THE ACACIA STUDY GROUP 1961-1995
and newletters produced

Dr. Allan Keane	1961-66	25	unnumbered	(1-25)
Robert Coveny	1968-69	4	No. 1-4	(16-29)
Inez Armitage	1971-76	19	No. 5-23	(30-48)
John Arnold	1977	1	No. 24	(49)
Marion Simmons	1978-91	39	No. 25-63	(50-88)
Bruce Clark	1991-	12	No. 64-75	(89-100)

ASGAP CONFERENCE: I travelled twice to the ASGAP Conference at Ballarat - for the Study Group Leaders Meeting on the Saturday and for the Study Group Display Night on Tuesday, staying on until 4 o'clock Wednesday. It was good to meet Acacia Study Group members who up until then had just been names, Elizabeth George (WA), Rosemary Pedler (SA), Russell and Irene Cullen and Barbara Henderson of Qld, and John and Marion Simmons from Tasmania and of course Fred Rogers again.

For the Acacia Study Group display I selected 12 slides and had them made into large prints which were mounted and laminated along with a short piece of information including a distribution map. These were chosen from the best of our slides with regard to representing variation of form and habitat area. Species shown were A. axillaris, crassa, cyperophylla, denticulosa, dunnii, guinettii, peuce, purpureapetala, retivenia, terminalis, verticillata and willdenowiana.

(ASGAP CONFERENCE continued) Photograghers are acknowledged on the mounting. The photographs were given a trial run at the Warrnambool and District SGAP (the group to which I belong) flower show prior to the Conference. They are available for display to any group prepared to meet the cost of certified postage.

"WATTLES ARE GOLDEN" is a 40 page booklet, typed in the same style as my newsletters. It contains extracts from every one of the 100 Acacia Group Newsletters. In it I have tried to cover as many aspects of Acacias as possible and it is interesting to see the variety of ideas which have been put forward over the years.

I have attempted to maintain the style of layout used for each item and by each leader - thus capital letters for specific names as used by Dr. Keane. Some changes have been necessary due to different keyboard characters and obvious mistakes have been corrected although undoubtedly new typing errors will have crept in.

The 180 selections are in the order of the newsletters in which they appeared and cover a wide range of topics including members reports on their acacias, thoughts and theories on germination, soil mixes, name changes, pruning, pests, a report on A. purpurpetala - the only non-yellow acacia, cuttings, how to press specimens etc. Long items have had to shortened, some to a few selected sentences, but I have attempted to have as large a range of topics as possible.

It was offered at the Conference for $5 per copy and is generally available for $6-75 (posted). **To current members of the Acacia Study Group it is available until the end of February 1996 for $5-40 (posted)** (14 45¢ stamps) - a limit of **ONE** copy per member at this price. If you have most of the newsletters there will not be much that is new, but for newer members it contains a lot of information from the group's past.

A.S.G.A.P. ACACIA STUDY GROUP FINANCIAL BALANCE SHEET 1994-5

Income		
	Balance 1/7/94	772.24
	Membership fees and donations	445.00
	Interest on Account	7.23
	Cash on hand 1/7/94	22.15
		1246.62
Expenses		
	Purchase of seeds	35.00
	Newsletters (duplication)	85.00
	Postage, envelopes etc.	132.45
	Duplication of slides	23.40
	Bank tax	0.23
	Cash on hand 30/6/95	2.80
	Bank balance 30/6/95	967.74
		1246.62

* I notice there was an error in dates on last year's balance sheet.

NEW MEMBERS: Welcome to new members:

Thais Eisen, 86 Taunton Street, ANNERLEY QLD 4103
Suzette Searle of 23 Cockle Street, O'CONNOR, ACT 2601.
Max McDowall, 10 Russell Street, BULLEEN VIC 3105
Mr & Mrs W.H. Sheather, "Yallaroo", Bundarra Road, ARMIDALE NSW 2350
Morton Kaveney, 100 Orana Road, OCEAN SHORES NSW 2483
Ki Cornwall, 11 Ocra Street, MT. ELIZA, VIC 3930

NEWS FROM MEMBERS.

Frank Prichard of Lockhart NSW writes: "I don't have any exciting news. The severe drought did not finish until two months ago when we had some reasonable falls of rain. Most of the trees and shrubs in the Galore Hill Reserve survived but some of the acacias which were planted in 1977 are fading out. I will continue to fill the vacancies while I can but I am like the acacia in that I will not live forever I am now 79 years of age."

Athol and Marion Durrre have returned from a collecting trip through Georgetown as far as Croydon, but failed to locate species they especially went after, but are busy trying to identify what they were able to collect.

Ivan Tiley comments on Win Bennet's article on A. peuce; "I was a member of a party travelling north of Birdsville in 1977 and we stopped and had a look at the stand of this species not far off the road to Bedourie. I could not get any seeds and the flower buds were just forming on some of the trees. It will certainly grow in very harsh conditions."

Elizabeth George (WA) (August) writes: "My acacias are providing colour in the garden. A.merinthophora and A. celastrifolia had a shorter blooming because of the stormy weather. A.iteaphylla was lovely for several weeks, and A.alata, A.aphylla, A. latipes, A. boormannii are still flowering. A. conferta is just opening and A. inophloia, A. leptoneura, A. spathulifolia are almost ready to open. .. I did not realize there were so many acacias still in the garden. They seem to fit into situations where I plant them. Their foliage make them very suitable and of course their flowers add lots of interest and colour. I love having their perfume in the air when I'm outside and frequently use several species in flower arrangements (except those with strong aroma). I'm sure acacias are under-utilized in general garden cultivation - possibly through lack of education and promotion."

New member Thais Eisen writes: "I have 30 acres north west of Brisbame on which I am attempting to establish a variey of wattles. As the land is on a ridge, has poor duplex soil and has been in severe drought for the last couple of years I am particularly interested in Acacias from the low rainfall regions. The area has a declining rainfall for the last 10 years and many of the very old Euc. crebra are dying but many of the Acacia seedlings are growing quite well with limited or no supplementary water.

I am also interested in insect attack (especially by longicorn beetles) on wattles introduced to an area as this may limit my plantings. Some years back I planted 20 A. saligna in a coastal area as a quick screen. Eighteen months later the average height was 10ft and ringbarking by the beetles was underway. Twelve months later every tree was dead and virtually every small branch was ringbarked. Extensive stands of local wattles showed little damage of this type. At present I have A. macradenia up to 10ft with with no sign of attack but A. frimbriata up to 4ft is already ringbarked."

From Jeff Irons (England) (Sept. '94): "Buds are forming on A. lucasii ex ASG seed. The plant is now about 1.5m high." (Nov. '95) "My A. lucasii is dead. A. pataczekii is covered in flower buds - its 1st flowering. Another seedling was given to the Royal Horticultural Society's Garden at "Rosemoor" in Devon. I had a letter from them recently saying that the tree is in "pride of place" in the house courtyard. The garden has a lot of Antipodean stuff, so we are taking members of the Australiasian Plant Society around it.

(Jeff and his wife are visiting New Zealand and Australia in early 1996.)

Russ and Irene Cullen find that a new residence on 686 sq.metres doesn't leave much room for native plants. "A.macradenia is a beautiful "do-er" in our conditions and the flower colour is rich. ... A. fimbriata is promising "a show" shortly - probably whilst we are away." (At ASGAP Conference - B.C.)

LEADER: One member has indicated they will "look" at the possibility of taking over as Leader while another has offered help if the seedbank was to be separated from the leadership. I have written to both of them (with this newsletter) outlining what is involved. If anyone else would like the information please contact me as soon as possible.
SLIDES: I have written notes for most of the first two sets. The third set "An Introduction to Acacias" has a few problems in juggling slides between sets. I'm rather involved in several local SGAP projects at the moment so further work will have to wait until next year. **As not all Acacia species are found in Australia I would like a good slide of an exotic species to underline this fact in the introduction - can anyone help me?**

BREEDING SYSTEMS OF ACACIA.

Acacia is a dominant genus of the Australian landscape with a number of species being commercially important within Australia and other countries. Despite this, domestication programmes have hardly commenced. To develop appropriate improvement strategies, we need to understand the breeding systems of these species.

Isozyme analyses have been used to determine mating system parameters for two tropical species, A.auriculiformis and A. crassicarpa. For each of two populations of each species open-pollinated families were ananlysed using seed collections from a large number of seed pods per tree. Both species were found to be predominantly outcrossing, with multilocus outcrossing rate estimates for all four populations being over 90%.

Pollen in acacias is dispersed as a polyad within which all individual grains are the product of a single sporogenous cell. It has been hypothesised that only a single polyad can fit on the stigma of each flower and therefore within a single seedpod all the ovules may be fertilised by the same father. In a population of A. melanoxylon the seed isozymes within 125 pods from 15 open-pollinated families were assayed and it was found that for approximately 90% of the pods, all seeds within a pod had the same father. This allows identification of the diploid genotype of the male parent and since all trees in the stand could be distinguished genetically the distance of each father from the maternal tree can be established and the size of the breeding populations estimated. In A.melanoxylon several flowers occur in each balled inflorescence and hence the paternity of seed pods from the same inflorescence could be determined. Our analysis of paternity amongst pods showed that the probability of seeds having the same father was high within a pod, smaller but still significant between pods in the same inflorescence, and very low betwen pods elsewhere on the tree.

Implications for tree improvement programs are:

* seed collection from trees in natural stands should be from many different fruit clusters.
* knowledge of the number and relative contribution of fathers to open-pollinated seedlots may permit more efficient design and analysis of progeny tests.
* in seed orchards planted with a small number of clones of known genotype, it should be possible to identify the male parent of seed in any particulat pod and hence circumvent the need for expensive and technically difficult controlled crossing programs. (This is inaccurate - clones have identical genotype and could not be so distinguished. - B.C.)

(By G.F.Moran, C. Muona & J.C. Bell; CSIRO Division of Forestry and Forestry Products; Canberra. Reprinted from ACIAR Forestry Newsletter Sept. 1988. Via Canberra Region SGAP Newsletter Dec.1989.)

ACACIAS ON THE INTERNET.

From Brian Walters (Newsletter Editor, NSW Region): One of the "perks" of being newsletter editor is having access to all the Study Group newsletters. As a former study group leader myself I know the amount of work involved and the frustration that can occur when members fail to provide meaningful feedback. ... I wonder if your members would be interested in what is happening in the world of the internet as far as acacias are concerned?

You may already be aware of this but the Australian National Botanic Garden is developing an extensive "on line" site on the World Wide Web and a major feature of the site is the section on Acacias. The site features descriptions and photographs of 100 species from all parts of Australia as well as descriptions of the features of the genus and basic notes on cultivation and propagation. I understand the species descriptions are taken from the forthcoming revised edition of John Wrigley and Murray Fagg's book "Australian Plants". It's a site well worth exploring and can be found at:

http://osprey.anbg.gov.au:80/anbg/anbg.html

(that may look incomprehensible but anyone with internet experience will know what to do with it).

On a somewhat less extensive basis, the NSW Region has recently established an internet site. This also features an Acacia section including notes on cultivation, propagation and uses of the genus. There is only one photograph (A.pubescens) as the site is designed to link into the Botanic Gardens Acacia area. I'd be interested in comments from any Acacia Study Group members on the NSW Region's site including suggestions for additional Acacia information and advice regarding any possible inaccuracies of the existing information.

The NSW Region's site can be found at:

http://www.ozemail.com.au/~sgap/acacia.html

(the ~ mark is not a printers error - it is a required part of the address.)

Finally you might also be interested to know that the Victorian Region is also developing an Internet site. There is nothing specifically on Acacias but members might like to have a look at:

http://vicnet.net.au/vicnet/club/sgap/index.htm

As I write this, A.flexifolia has finished its spectacular display (is there a better snall wattle?), A. cardiophylla is approaching its peak and A.pubescens is in bud. I didn't realise that I had so few Acacia species in the garden ... I'll definitely be putting a few more in. Unfortunately it rarely lasts 10 years before the borer attack becomes too much ... makes great firewood though!

(Thanks Brian - I opted out of newsletter exchanges with other groups as it is an expense on the membership. I join a few other groups I have a particular interest in. I do look forward to receiving the Regional newsletters (except WA which does not send one) because of interesting articles not seen elsewhere.)

PHOTOS: Thanks to Rosemary Pedler for a photo of Acacia confluens taken from Silleas Lookout at Arkaroola S.A and to Athol and Marion Durre for the photo of their A. racospermoides in flower. I intended to use both photos in this newsletter but as most photos do not reproduce well on my photocopier have been unable to do so.

FROM S.A. S.G.A.P. JOURNAL Nov. 1995: Well known writer, Ivan Holliday, relates a mystery of his Acacia ashbyae which he describes "as a spreading bushy shrub, 1.5 m high by 2.5 m across, with branches to ground level. It features lovely soft, silvery-grey,very narrow phyllodes. ... Unlike most acacias this shrub flowers over a very long period (all of July and August in my garden). ... my specimens do not conform to the description ... in Encyclopedia of Australian Plants. ... Either Elliot and Jones are in error or I have been sold a pup (at our Plant Sale)!"

AUSTRALIAN PLANTS AWARDS TO DAVE GORDON AND FRED ROGERS.

ASGAP's highest award to an individual has been awarded to two members of the Acacia Study Group, Dave Gordon of "Myall Park" Glenmorgan (Qld.) and Fred Rogers of Vectis (Vic.). Both have long and distinguished histories of involvement with Australian plants.

Dave, who is 96, has spent a life time in the collection, propagation and growing of Australian plants. His garden of 120 hectares and comprising 10,000 plants has been gifted to Myall Park Botanic Gardens Limited.

Fred has been involved with Australian plants for many years and SGAP since 1959. He is best known to acacia enthusiasts for his book "A Field Guide to Victorian Wattles" and has been a longtime member of the Acacia Study Group.

Further details of Dave and Fred can be found in ASGAP Newsletter No.16.