

Australian Native Plants Society (Australia) Inc.

ACACIA STUDY GROUP NEWSLETTER

Group Leader and Newsletter Editor Bill Aitchison 13 Conos Court, Donvale, Vic 3111 Phone (03) 98723583

Seed Bank Curator Esther Brueggemeier 28 Staton Cr, Westlake, Vic 3337 Phone 0403 078708

Email: acaciastudygroup@gmail.com

.....

.....

ISSN 1035-4638

*

No. 117 June 2012

Contents	Page
From the Leader	1
Welcome	2
Study Group Field Trip	2
From Members and Readers	2
Some Coming Events	2
Acacia terminalis	3
The Niger Edible Acacia Network	4
Acacia bartlei	5
Feature Plant – A. longiphyllodinea	
Acacias in Costa Rica	7
Non Flowering of Acacias	7
Books	8
So many beautiful small Acacias	9
Seed Bank	9
Study Group Membership	9

From The Leader

Dear Members

I am writing this having just got home from a weekend attending one of APS Victoria's quarterly weekend meetings – these are hosted in turn by the various District Groups, and this one was at Geelong, an hour's drive from Melbourne. The weekends are a great opportunity to visit local gardens and bush areas, to listen to a guest speaker and to catch up with APS members from across the state.

I am excited to have brought home an Acacia nervosa, from Phillip Vaughan's Australian Plants Nursery at Leopold. This is one of those wonderful small Acacias rarely found in nurseries (at least not in Victoria). Two other small Acacias

Acacia Study Group Newsletter No. 117

that were available at the nursery were A. rossei and A. congesta, again both great plants but often not easy to find in nurseries. A. rossei can be difficult to maintain under cultivation – much more difficult than A. nervosa.

On the subject of wonderful small Acacias that are not cultivated as much as they deserve to be, I recently attended a talk given by Royce Raleigh, a long time grower and expert on Australian plants (who lives at Wartook in the Grampians in Victoria). Royce made the observation that there are many small beautiful Acacias that are not grown as much as they should be. On page 9 of this Newsletter, I have included two photos supplied by Royce, taken in WA.

It is now only about two months until our Field Trip to the Northern Tablelands in NSW. If you are planning to attend, please refer to the information on page 2 and in our March Newsletter.

As for all Study Groups, membership fees fall due on 1 July each year - so it is now that time of year. It would be greatly appreciated if you could attend to this payment (or advise if you do not wish to renew your subscription). Details regarding membership fees and payment options are shown on page 9. Some members have paid some years in advance, and some have still not paid for the last twelve months - if you wish to check on what date you are currently paid up to, please let me know. And if you do not wish to renew your membership, could you please let me know so that I can amend our membership records.

Our 2012 financial statement and an updated Seed List will be published in the next newsletter in September.

Bill Aitchison

Welcome

A special welcome to the following new member to the Study Group:

Natalie Peate, Blackburn, Vic

Study Group Field Trip

As advised in previous Newsletters, our Study Group Field Trip in the Northern Tablelands of NSW is taking place on the weekend of 18 and 19 August.

Details of the program for the weekend were included in our March Newsletter. If you are intending to come along and have not yet confirmed your attendance with either John Nevin or Bill Aitchison, please could you do so – we will then keep you informed in relation to planning for the weekend.

Contact details for John and Bill are as follows: John Nevin (jrnevin@nsw.chariot.net.au, or phone (02) 67752128) Bill Aitchison (acaciastudygroup@gmail.com or phone (03)

98723583).

Note: As advised previously, to take part in the weekend you must be a financial member of the Australian Plants Society (or equivalent body in your state).

From Members and Readers

Arthur Baker (Gatton, Qld) writes (26 March 2012) following the note on *Acacia gittinsii* in our March Newsletter: "... a reference to *Acacia gittinsii*...I have several mature plants some up to 4m and some 2m with a spread of approx 3m. All have many seedlings appearing near established plants...They flower well in fact some have buds now...Conditions are sandstone based soil and growing under spotted gums."

Brendon Stahl (Deans Marsh, Vic) writes (3 Jun 2012) as follows:

"APS Colac/Otway Group will be giving away acacias at St. Mary's Garden Expo which is usually held late September or early October. They will be *Acacia suaveolens* and *A. iteaphylla*. These have been propagated by group members.

I continue to enjoy my 160 plus acacia species and have acacias flowering every month of the year. Unfortunately due to my recent heart attack, we have made the decision to sell our fourteen acre property, which has mostly sandy soil. There may be a member of the Study Group wishing to buy such a property."

Brendon lives at 9 Parkers Road, Deans Marsh, and may be contacted by phone on 03-52363325 or email <u>brendonstahl@bigpond.com</u>. Those members who attended the 2009 ANPSA Biennial Conference at Geelong may recall visiting Brendon's garden on one of the day tours.

Our March Newsletter included some photos from **Tony Cavanagh** of Acacias growing as street trees at Ocean Grove, Vic, one of which was suggested as possibly being *A. montana* or *A. ixiophylla*. Botanist **David Cameron** comments on this photo as follows: "... I would have thought the plant more likely to be simply the popular *A. howittii* which naturalises readily and sometimes crosses with other related species to produce hybrids or backcrosses which can be difficult to identify (or misidentify as is often the case)".

Some Coming Events

On Sunday 22 July, the Friends of the Royal Botanic Gardens Cranbourne are holding an Acacia Workshop, **Australian acacias, our wondrous wattles!** The presenters at the Workshop include a number of members of the Acacia Study Group, Dr Dan Murphy, Tracey Perrott, John Thompson and myself. In addition Esther Brueggemeier will join a Q & A panel. The Workshop is being held at the Cranbourne gardens (in Melbourne's south east).

Further information is available at <u>www.rbg.vic.gov.au/rbg-</u> <u>cranbourne/friends-cranbourne</u>. Note that the fee is \$50, and the Workshop is only open to members of the Friends – so if you wish to attend and are not a member, you would need to join the Friends Group.

The **APS East Hills Group** in Sydney is planning to feature Acacias at one of their future monthly meetings. They have one speaker already lined up to make a presentation at their meeting, but are looking for someone else who would also be able to join in their meeting and make a presentation. If you would be able to help in this way, please contact the Group's secretary **Kathy Manning** (phone 02 97924552 or 0407456295). Note that the Group meets on the first Wednesday of the month at Peakhurst South Primary School at 7.30pm.

The **Bendigo Native Plant Group** are holding their **Australian Flower Show and Wattle Spectacular** on the weekend of 1st and 2nd of September 2012 from 10.00am to 4.30pm, at Rotary Gateway Park Hall, High St (Calder

Highway) Kangaroo Flat. With the assistance of the Acacia Study Group with the supply of seed, the Group have propagated and will have for sale in tubes, approximately 80 species of Acacia many of which are not usually available. In conjunction with the Wattle Spectacular they will also have a Wattle tour through the "Whipstick" part of the Greater Bendigo National Park.

For more information and tour bookings, contact **Ian Evans** AH (03 54467326).

Acacia species for sale in tubes: *camptoclada*, *chinchillensis*, *chrysocephala*, *huegelii*, *curvata*, *enterocarpa*, *lineata*, *laricina* var *laricina*, *leptostachya*, *deanii* ssp paucijuga, spectabilis, wattsiana, subulata, *inophloia*, *lazaridis*, *pulchella* var Kamballup, *restiacea*, *triquetra*, *denticulosa*, *multisiliqua*, *trigonophylla*, *triptera*, *patagiata*, *lanuginophylla*, *uncinata*, *rigens*, *brachybotrya*, *kettlewelliae*, *leptalea*, *conferta*, *binata*, *tindaleae*, *tetragonocarpa*, *xanthina*.

Acacia species for sale in small numbers: *arrecta*, *declinata* prostrate, *biflora*, *ausfeldii*, *browniana* var *intermedia*, *exocarpoides*, *helicophylla*, *grasbyi*, *gilbertii*, *heterochroa* ssp *heterochroa*, *intricata*, *hemiteles* "Goldfields", *obovata*, *lasiocarpa* ssp *sedifolia*, *flagelliformis*, *idiomorpha*, *celastrifolia*, *retivenea*, *hastulata*, *leichardtii*, *uncinella*, *craspedocarpa*, *subflexuosa*, *luteola*, *littorea*, *tratmaniana*, *hubbardiana*, *flexifolia*, *cochlearis*, *melleodora*, *dictyoneura*, *jibberdingensis*, *incurva*, *handonis*, *browniana* var *browniana*, *merrallii*, *sulcata* var *planoconvexa*.

For keen (amateur) photographers, the **APS Yarra Yarra Group** and the **Diamond Valley Photographic Society** are jointly organizing a photographic competition themed Australian Native Flora. The winning entries will be displayed at the Australian Plants Expo on 8 and 9 September, at the Eltham Community & Reception Centre, Eltham, Victoria. Further details are available at <u>www.dvps.org.au</u>. It would be great to see a few Acacia photos feature in the winning entries (anyone in Australia can enter).

Acacia terminalis

by Victoria Tanner, Calwell, ACT

Acacia terminalis had never really come to my attention until late March - April this year. During this period, the ANPS (Canberra) made a number of trips (coincidentally) to various areas where the species grows and so it was impossible to ignore the plant.

The first weekend trip was to Moss Vale and to its two nearby national parks, Budawang and Macquarie Pass. Both parks are located on escarpments of Hawkesbury Sandstone having a mixture of cool and warm temperate and subtropical rainforest. Both areas have suffered from historical logging and weed infestation. However, it is here that *Acacia terminalis* first drew itself to my attention and it was the same for other members of the visiting group. Unusually for an acacia, the leaves themselves drew favourable comments from those who admired the form, attractive pattern and their deep green colour (at this location, these acacias were only starting to flower with a soft lemon colour). In general, these plants seemed to grow mainly in dappled shade and in quite poor soils, extending their reach in to heath lands and coastal sand dunes.

The next ANPS trip was a day walk to Wanna Wanna Reserve outside of Queanbeyan, where *A. terminalis* was just one of the acacias growing on this small reserve. Although flowering, most plants were quite scraggly but still attractive.

Another day trip to the top of the 'Corn Trail' (off the Kings Highway) again saw the acacia growing commonly throughout the walk.

The last trip undertaken was a weekend trip to Croajingalong National Park and again, *Acacia terminalis* was widespread and then in near full flower. Surprisingly it grew in all habitats including most roadside drives from forest, heath lands and to coastal foreshores. Looking back, the acacia did seem slightly different over the range of the parks visited and this is now understandably so with a number of subspecies having been identified.



Foliage of A. terminalis, on dirt roads on way to Wingan Inlet, Croajingalong NP (probably along Cicada Trail)

From various research sources it seems that there are four subspecies: *longiaxialis, angustifolia, aurea* and *terminalis.* The latter subspecies (a shrub) is limited to Botany Bay and the eastern suburbs of Sydney and is listed as endangered (NSW Environment Dept.). Collectively, the species is often described as a bipinnate wattle, growing as a shrub or small tree up to 5 metres. Its location is widespread throughout eastern Australia (northern NSW - Tasmania).

.....



A. terminalis ssp angustifolia at Tamboon Inlet, Croajingalong NP

The Worldwide Wattle website describes the subspecies *'longiaxialis'* as growing up to 3m. Subspecies *angustifolia* is said to grow to 6m (including in Croajingalong NP) and subspecies *aurea* grows to 2m (samples in Budawang NP). The species is said to be easily propagated from seed with the usual hot water treatment but the plant may be short-lived due to attacks from borers. I have recently obtained two small plants (locally) and some seeds from the study group, so I am interested to see how they go.

A. *terminalis* is certainly an attractive hardy plant for the home garden but seems to require good drainage although withstands shade - full sunlight. The plant's form would seem to depend on the subspecies and growing conditions.

The Niger Edible Acacia Network

by Peter Cunningham, World Vision Australia, SIMaid, Tarrington Vic.

Niger, a poor country in West Africa has again been in the international news - it is in the grip of one of the worst famines in the last 25 years. More that 5 million people are facing starvation. Neighbouring countries in the Sahel have also been affected. The reasons for the latest famine are complex, but include poor crop yields due to land degradation, poor soil fertility and inadequate rains in 2011, high population growth, a predominance of subsistence farmers/herds who depend entirely on the land, extreme poverty and high food prices. Whilst the Niger government and aid organisations have been providing some food aid, long term development solutions are needed to improve resilience and prepare for famines which are expected to increase in frequency.

The SIM project- "Sowing Seeds of change in the Sahel" (SSCS) based at Maradi has been responding to the development needs of Niger over the last 30 years and developing a new food crop - edible Australian Acacias (*Acacia colei, A. torulosa, A. tumida, A. elachantha*). Tony

Rinaudo outlined the use of Wattle Seed in Niger (see ASGN No. 116) and although small in scale (approx 1000 people, 4 tonnes seed produced/annum) there was great potential to improve food security by the development and use of edible Acacias which are well adapted to the harsh conditions in the Sahel.



Acacia colei with a heavy seed crop, near Maradi, Niger

A significant step forward occurred in 2010 with the formation of the Niger Edible Acacia Network (NEAN) - a group of organisations interested in developing and growing edible Acacias for multi-purpose use, including human food. This group has been meeting annually. The third NEAN meeting was held at Maradi from 1-2nd March 2012. There were 33 participants from four West African countries (Niger, Ghana, Senegal, Chad), representing nine organisations including seven Non Government Organisations (NGO's), one government organisation and farmer groups present. Following a review of the NEAN vision statement, presentations from key food security and Acacia specialists with World Vision (WV) Australia outlined the use of Acacias for improving food security in the Sahel, progress on Acacia foods and their use in farming systems and the restoration of degraded lands. Local farmers also shared their successes and challenges of growing/using edible Acacias.



Participants in the 3rd NEAN Meeting

An Acacia food demonstration and a field trip to see Acacia development, agronomic, silvicultural and farming systems research helped to enhance communication, exchange of ideas, and technical support. Much encouragement was had to promote wider scale up of edible Acacia plantings and use in Niger, Ghana and Senegal.

Some of the main outcomes and conclusions include:

- The meeting was another step forward to progress the use of edible Acacias in Niger.
- The NGO's Adventist Development and Relief Association, Samaritans Purse, and WV with training support from the experienced SSCS project (SIM) team are making good progress with Acacias in their food security programs. These NGO's have grasped the realization that more robust, drought tolerant and resilient food production systems are needed that include the multi-purpose edible Acacias if any measure of food security and sustainability is to be attained.
- Some of the identified research needed includes the selection and breeding of species adapted to lower rainfall (<350 mm), agronomic research to identify the causes of poor seed production, market research, economic analysis of benefits derived from Acacias, new Acacia foods and products.
- For the Moringa- Kunnu weaning food (based entirely on local ingredients) to be developed recipes need refinement, testing and official registration for large scale production. At least 20 tonnes of Acacia seed is needed per annum. This could become a significant weaning/aid food for Africa and replace the need for Plumpy Nut type products which include significant quantities of imported ingredients.
- Markets. Edible Acacia seed needs to be valued and products developed for trade that will naturally lead to large numbers of trees being planted to capture income from markets. Value and ownership needs to encompass all societal groups.
- Reclamation of degraded lands. A high proportion of Niger's arable land (>70%) is highly degraded. Edible acacias are pioneer species and well adapted to growing in highly degraded land to produce a range of products and help restore the land for annual cropping and other uses. Widescale community led projects could transform large areas of degraded land and return these back to productive farming regions.
- A welcome addition to the meeting was the presence of Dr. Brian Hilton (Food security advisor from WV Australia) and key representatives from WV Senegal and Ghana who aim to expand edible Acacias to other West African countries.

• The formation of a NEAN secretariat made up of representatives of key NGO's and Government was suggested as an important step forward. The lack of Government commitment, involvement and ownership in the development and use of edible Acacias remains a significant hindrance to widespread use/adoption of these trees in Niger.

Acacia bartlei

Acacia bartlei is a recently described new species of Acacia. It is a rare species restricted to an area north and east of Esperance, WA where it grows in often waterlogged depressions. It is closely related to *Acacia redolens*, but differs in a few aspects eg it is an erect shrub or tree and never prostrate, and has narrower phyllodes that are not vanilla-scented.

Reference:

Maslin, B. R. and Reid, J.E. (2012). *Acacia bartlei* (Fabaceaa; Mimosoideae), a new species from near Esperance, Western Australia Nuytsia 22(2): 51-56

Feature Plant – Acacia longiphyllodinea by Bill Aitchison

At last year's ANPSA Biennial Conference, as part of our Study Group display we carried out a survey where one of the questions asked related to the favourite wattle(s) being grown in the respondents' gardens. *Acacia longiphyllodinea* was listed by one of the respondents, and for this reason I thought it would be appropriate to include a note on this species in our Newsletter.

It is an open wiry shrub 2-4m high that occurs naturally in south-western WA from the Geraldton district inland to Yalgoo and south to Bencubbin, growing on sand-plains in low eucalypt woodland. It is one of the many species of Acacia that were described and named by Joseph Maiden, in 1917. The species name means long phyllodes, its phyllodes being rigid, needle-like 15-45cm long and 1-1.5mm diameter.

It has bright yellow flower spikes 3-4cm long on peduncles about 1cm long, either singly or in pairs in axils. Flowering is generally in the August-September period.

A review of our old Study Group newsletters indicates only very infrequent references to this species (other than its regular listing in our Seed Bank). In 1976, Inez Armitage included a brief description of it – referring to it as "a spectacular species with extremely long very narrow phyllodes, almost terete, and deep golden spike flowers". In 1985 Marion Simmons also included a short description of it, and commented that it "needs good drainage". Apart from good drainage it would require a warm sunny aspect.



Acacia longiphyllodinea Illustration Marion Simmons

Within Victoria I can't find any reference to it currently being grown in gardens, nor listed in any nursery catalogues. Although, back in 1966 in Australian Plants, Fred Rogers referred to a plant growing successfully in a garden in Montrose (an outer Melbourne suburb). Being such an ornamental shrub with attractive flower spikes, maybe it is one of those wattles that does deserve to feature more often in gardens.

Propagation is from seeds, although in Maslin (1998) it is stated that it is not easy to propagate, and reference is made to informal germination tests, using various hot water treatments. It is stated that "less than 50% germination was achieved by boiling the seed for 3 minutes and then soaking them overnight before sowing. Even poorer responses were obtained from using untreated seeds or ones that had simply been soaked overnight in just-boiled water before sowing."

References:

Maslin (1998) "Wattles of the Kalannie region: their identification, characteristics and utilisation" Simmons, M.H., Acacias of Australia Vol 2 Flora of Australia Vol 11B Australian Plants Vol 4 page 32

A. longiphyllodinea – common name

I have found two common names applied to *Acacia longiphyllodinea* – being Long-leaf Rock Wattle, and Yalgoo. I was interested to learn of the background to the common name Yalgoo, and did some research into this, but have become somewhat confused.

Yalgoo is a small town located 216 kilometres east of Geraldton and 497 kilometres north-east of Perth (and this Acacia occurs in this locality).

In her book, Beckoning West: The Story of H. S. Trotman and the Canning Stock Route, Eleanor Smith explains the name Yalgoo as follows:

"The name Yalgoo is a corruption of the native word Yalgru – meaning blood – which applied also to a species of *Eucalypt gummifera* growing prolifically in the area. When cut, this tree – commonly known as "bloodwood" – exudes a dark red gum from which the name derives. It was appropriate for various reasons, for not only was Yalgoo the site of many ceremonial corroborees entailing blood rites but it was soon to have the reputation of being the town where more died violently than in any other on the fields."

Based on this explanation, it is *Eucalyptus gummifera* (*Corymbia gummifera*) that should have the common name Yalgoo – but this is not quite right as *E. gummifera* is an east coast species and does not occur in WA.

In another book, Yalgoo, by Alex Palmer, it is noted that Yalgo was the Aboriginal word for blood in the local dialect, and that Yalgoo was spelt Yalgo on the original proclamation of the township. It also states that:

"There is in fact a Yalguru tree which has a preference for the white alkaline calcrete earth which outcrops through and contrasts with the blood-red soil. The tree does not appear to have red sap unless under certain climatic conditions there is a change. Its leaves do however have the distinct salty flavour of tears.

The tree is fairly common in other parts of the State and has the botanical name of *Acacia victoriae* but only around Yalgoo is it called a Yalguru tree, sometimes spelt Yalgrew."

So, I am still confused – as to how *A. longiphyllodinea* has a common name of Yalgoo which means blood, and how Yalgoo (or a similar name) is stated as also applying to a Corymbia (that is not found in WA) and to another species of Acacia. Maybe someone can enlighten me?

References:

Smith, Eleanor. Beckoning West: The Story of H. S. Trotman and the Canning Stock Route Hesperian Press 1998

Palmer, A. Yalgoo Hesperian Press & LAP Industries 1999

Acacias in Costa Rica

Eraldo Boracchia lives in Costa Rica and joined the Acacia Study Group earlier this year (Costa Rica is in Central America just north of the equator).

Eraldo is growing a number of Acacias but is puzzled as to why some of his plants are not flowering. He has provided some information regarding the weather and his location in Costa Rica, and the species he is growing.

He advises that he lives about seven minutes away from the small village of Ciudad Colon, among coffee plantations and very big trees. His garden is located in premontane moist forest in the protected area of El Rodeo, at 850 metres above sea level. They have a dry season from December to April, and a rainy season during the other months. The average rainfall during the year is 2400mm.

In relation to temperature, the monthly maximum and minimum temperatures during 2011 were as follows:

Month	Average Max Temp	Average Min Temp
	(°C)	(°C)
January	26	18
February	27	19
March	27	19
April	28	20
May	29	18
June	29	21
July	29	21
August	28	21
September	27	20
October	27	20
November	27	19
December	26	18

The minimum temperature over the year occurs in December and January (15°C) and then only for a few days.



A. podalyriifolia, buds but no flowers Photo Eraldo Boracchia

Eraldo is growing the following Acacias in his garden (the

year of planting is shown in brackets):

Acacia auriculiformis (2009) Acacia baileyana (2010) Acacia fimbriata (2009) Acacia podalyriifolia (2010) Acacia holosericea (2011 Acacia longifolia (2010) Acacia saligna (2010) Acacia spectabilis (2009) Acacia subulata (2010)

All of these plants are growing well, but there are a number that are full of buds that remain on the branches without coming into flower. In particular this applies to *A*. *auriculiformis*, *A. baileyana*, *A. fimbriata*, *A. podalyriifolia*, *A. longifolia*, *A. saligna* and *A. spectabilis*.

On the other hand, *A. deanei* flowers throughout the year and Eraldo has used its seeds to propagate further plants. *A. holosericea* and *A. subulata* have also flowered with no problem.



A. holosericea flowers

Photo Eraldo Boracchia

Eraldo has asked a question as to why some of his Acacias will not flower. I have had some communications with him in relation to this question and have discussed this further below.

Non-flowering of Acacias

My discussions with Eraldo have led to a conclusion that the most likely explanation for the non-flowering of some of his Acacias, despite the formation of buds, is that the temperatures where he lives in Costa Rica are too high.

We found references to two studies suggesting that temperature is an important factor in floral development with *A. pycnantha* and *A. baileyana*.

In 1985 it was reported that with *Acacia pycnantha*, initiated flowers will develop and open only if the temperature is below 19°C (Sedgley, 1985).

Some research published in 2002 indicated that *Acacia* baileyana required temperatures at or above a mean

.....

maximum of 18°C and a minimum of 13°C for bud formation, and at or below a mean maximum of 16°C and a minimum of 9°C for flowering (Morgan & Sedgley, 2002).

Our conclusion that temperature is an issue with Eraldo's non flowering may well not be correct – Eraldo and I would welcome any comments and thoughts by other Study Group members on this question.

I would mention that two other possible explanations that we considered (but then rejected) were:

- that because Acacias may remain in bud stage for several months before flowering, it was just a matter of Eraldo being more patient and his plants would eventually flower.
- that the buds were being damaged by some pest or disease, and this prevented flowering (his plants do appear very healthy).

References:

Sedgley M (1985) Some effects of temperature and light on floral initiation and development in *Acacia pycnantha*. Australian Journal of Plant Physiology 12, 109-118. Morgan A, Sedgley M (2002) Environmental control of bud formation and flowering of clonal *Acacia baileyana* F. Muell. for ornamental horticulture. Australian Journal of Experimental Agriculture 42, 211-6.

Books

Australia's Poisonous Plants, Fungi and Cyanobacteria By Ross McKenzie Published by CSIRO 2012, Hardback, 976 pages, RRP \$195

This is a recently published comprehensive guide to the major natural threats to health in Australia affecting domestic and native animals and humans. The plant species included in the book have been chosen because of their capacity to threaten life or damage important organs, and having regard to their abundance in native or naturalized Australian flora, or because of their extensive cultivation as crops, pastures or in gardens.

Understandably, the references to Acacia in the book represent a very small component of the total book, although over 60 species of Acacia are listed. These are most commonly identified as being dangerous because of the presence of cyanogenic glycosides – the risk here being mainly to herbivores.

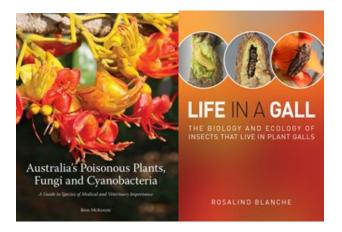
The Acacia ranked as being most dangerous is *Acacia georginae*, whose seeds and phyllodes contain fluoroacetate. This can be toxic to ruminants and horses.

Interestingly, the author notes that some graziers with *A. georginae* on their properties believe that there are "toxic" and "safe" populations of the plant, but this has not been confirmed by assay of the plants. It is suggested that further research is required to finally settle this question.

Although the book will no doubt be an invaluable reference source to a specialists including farmers, veterinarians, horticulturists, botanists, medical practitioners and paramedics, its straightforward and readable style and excellent presentation with many colour photographs should also make it of interest to an even wider audience.

Note: In relation to the comment above on *A. georginae*, the following is an interesting extract from an ASG Newsletter in 1968 (by Mr Des Nelson, of Alice Springs):

"I might mention that the most serious poisoning problem in the Centre is caused by an Acacia. It is *A. georginae* "Gidyea", which occurs abundantly to the N.E. of Alice Springs, in alkaline soils. It is poisonous only over towards the Qld border, where certain trees will produce a poison similar to 1080 (sodium fluoroacetate) for which there is no known antidote. In regions close to Alice Springs the tree is harmless and a useful stock feed. To date research has failed to provide an answer as to why the tree is safe in one area, and sporadically poisonous in another."



Life in a Gall: The Biology and Ecology of Insects that live in Plant Galls By Rosalind Blanche Published by CSIRO 2012, Paperback, 80 pages, RRP \$29.95

I am sure that many of our Study Group members will have observed plant galls on Acacias, both in the wild and in cultivated plants. And there may be some, like me, who have never really understood how these galls form and what they are – maybe this is why I found this small book so enlightening and fascinating.

The book explains that the unusual growths on plants, called galls, are the result of an insect inducing the plant to provide

it with a place to live and feed. The gall-inducing agent does not build the gall, rather it is formed by the plant in response to the gall-inducing agent.

Within Australia, galling is concentrated within only a few plant groups, Eucalypts being the most common, but followed then by Acacias and figs. Not surprisingly, Acacias feature quite prominently within the book. For example:

- Various examples of insects that induce galls on Acacias are provided.
- Whilst most galls are the result of insect induced activity, galls can also result from other causes eg the rust fungus *Uromycladium tepperanium* infects many species of Acacia.
- The book discusses the introduction to South Africa of two gall-inducing wasp species, with the aim of controlling *A. longifolia* and *A. pycnantha*, these species having become invasive weeds in that country.
- The book explains how a wasp provided food for Australian Aboriginal people by inducing round, lumpy galls on *A. aneura* (this gall is called a mulga apple).

The author notes that there are still numerous questions surrounding Australian gall-inducing insects and their life in galls, and suggests that this work need not be restricted to professional scientists but can also be carried out by diligent amateurs - the book provides some tips for people who want to collect and study galls.

So many beautiful small Acacias

Royce Raleigh (Wartook, Vic) recently made the comment that "there are just so many beautiful acacias". He subsequently forwarded two photos of small wattles, both of which he photographed in WA along the road to Cascade, between Lake King and Esperance.



Maybe it is one of the subspecies of A. sedifolia

Royce did not know the identity of either of these wattles,

and we therefore referred the photos to an Acacia expert. The advice that we received was that in the absence of a specimen or close up of the phyllodes, identification is tricky. Both images, and the advice received on possible identifications, are shown.



Maybe A. cracentis

Seed Bank

A list of species held in our Study Group's Seed Bank is included in our September Newsletter each year. Requests for seed should be directed to Esther Brueggemeier. 18 packets maximum in each order (negotiable). Limit of 3 orders per member per year. Please include \$2 in stamps to cover the cost of a padded post bag and postage.to cover the cost of a padded post bag and postage.

Study Group Membership

Acacia Study Group membership for 2012/13 is now due:

\$7 (newsletter sent by email)\$10 (hardcopy of newsletter posted in Australia)\$20 (hardcopy of newsletter posted overseas)

Subscriptions may be sent to: Bill Aitchison 13 Conos Court Donvale, Victoria 3111

Subscriptions may also be paid directly to our Account at the Bendigo Bank. Account details are: Account Name: ASGAP Acacia Study Group BSB: 633-000 Account Number: 130786973

If you pay directly to the Bank Account, please advise us by email (acaciastudygroup@gmail.com)