

Australian Native Plants Society (Australia) Inc.

ACACIA STUDY GROUP NEWSLETTER

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From The Leader

Dear Members,

Where has the year gone? It seems the busier one is, the faster time flies and this year was no exception. With all the amazing rain so far, the yearly 'summer' prune is proving rather interesting. The Acacias that were pruned early November have literally exploded with new lush growth so much so that they will need another trim before the year is out. As many of you know, my life is extremely busy and anyone who is a carer will also understand the constant roller coaster that we must somehow balance and manoeuvre through. This year there has been an increase in various problems with my 'special needs' daughter. Unfortunately, I am no longer able to juggle all things important to me so I was faced with the difficult task of simplifying and cutting back various activities in order to have more precious time to devote to my family and their specific needs.

After discussions with ANPSA we are happy to announce a new leader for the Acacia Study Group that will take effect from the 1st January 2011. Our new leader is one that you already know and without his help over the past years I would not have accomplished half of the many tasks involved in running this study group. Please welcome as leader, Bill Aitchison. Bill is well known for his accurate and consistent work of newsletter editor and is very capable for his new role.

I shall take care of the financial side of things until the new financial year in July 2011 and also continue as seed bank curator as long as possible. Sad as I am to do this, the family does take priority.

In the meantime, take care over the holiday season and enjoy family and friends and the miracles we see every day.

Cheers,

Esther Brueggemeier

Acacia Study Group Newsletter No. 111

Welcome

A special welcome to the following new members and subscribers to the Newsletter:

Arthur Baker, Gatton, Qld Lee Esdaile, Hallsville, NSW James Martin, Kootingul, NSW Steven Slade, Woy Woy, NSW Victoria Tanner, Calwell, ACT Vernon Winley, Mosman, NSW

Lee is a member of the Tamworth Group, and was spurred to join the Study Group by the recent Australian Plants issue on Acacias!

Steven has been involved in native plant propagation for many years and acacias are an area of special interest to him.

Vernon's main interest in seeing which acacias he can grow on his holiday retreat at Oberon in the NSW central tablelands (about 1,000 metres) – he notes that he can't grow many in a unit in Mosman!

Greetings from Tasmania

Hello Bill,

On receiving the latest copy of the ASG newsletter my thoughts suddenly turned to the fact that here, in southern Tasmania, and I am led to believe, in the north, we have just witnessed one of the best spring flowering seasons for Acacias in many years.

There have been quite good rainfalls in the past few months although nothing out of the ordinary. However, temperatures, on the whole, have been and are somewhat above average for the winter and spring seasons.

Whether this has influenced our Acacias here in southern Tasmania, at least, I cannot say but it has been a bumper flowering for a number of species around the Mount Wellington foothills and adjacent districts.

The most spectacular, of course, is *Acacia dealbata*. This species has, literally, painted the bush bright yellow for as far as the eye can see and, not only were there great splashes of yellow against the usually sombre green background, but it lingered for a much longer period than we usually expect.

Other species that seemed to flower more profusely this spring, include *A. genistifolia*, spiny beast, but with glorious random blobs of yellow amongst the dry sclerophyll undergrowth and *A. verticillata* subsp. *verticillata* flamboyant in shadier, damper forests; the latter species was

almost hard to believe, so profuse its blossoming this season. Also worthy of mention is what we once knew as *A. verniciflua*, but now, unfortunately, it's *A. leprosa* var. *graveolens* in Tas.! (oh dear!). Normally we expect this to have a paucity of flowers at the best of times, but this year it has been extraordinarily prolific and a joy to see, perhaps indicative of a bumper seed crop - for once?

In my garden, *A. axillaris* (our rare endemic) is covered in blooms and *A. riceana*, another of our endemics, has also outshone itself!

Also of particular interest is *A. mearnsii*. "Normally", this species usually commences to flower about the end of December around here. It is now almost in full flower - in mid November; not only that it, too, looks to be trying to outdo many past season's efforts in producing a bumper blossom display.

I hope this little piece of news is of interest to you? Perhaps other readers have had the same "wattle-based" pleasure as have I this spring!

With best wishes,

Alan M. Gray Tasmanian Herbarium

Origin of Acacia

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Jeff Irons ((Wirral, England) comments as follows in relation to the issue of the origin of Acacia raised in our previous Newsletter No. 110.

Surely the recent split of Acacia indicates that while they may have had a common ancestor, African and Australian plants evolved independently?

I consulted the 1994 book "History of the Australian vegetation, Cretaceous to recent." (Not long ago the Prahran bookseller Andrew Isles offered a copy at a bargain price). On page 239 it stated:

"The earliest pollen record of the family (*Polyadopollenites* sp.cf. *P. granulosus*, *Acaciapollenites miocenicus*) occurs in the latest Eocene-Early Oligoceneand, possibly significant, both are first recorded in marginal marine sediments. Acacia (Acaciapollenites myriosporites) shows a similar preference for riparian habitats when it first appears.....If correct, then *Acacia* spp. have evolved from coastal/shoreline species. This thesis accords with a global appearance of *Acacia* polyads in the Oligocene."

Request for photographs

by Bruce Maslin and Jordan Reid, Department of Environment and Conservation, Perth, Western Australia

Commencing in January 2011 we will commence an exciting new 18 month project aimed at updating the WATTLE identification key and delivering this through a web interface. This work will be undertaken as part of the Acacia theme within the Atlas of Living Australia (see below).

The project will deliver an updated interactive key to all described Australian Acacia species, including those that have been newly described since the publication of WATTLE in 2001. A dynamic fact sheet will be included for each species and this will include a description, line drawing and information on nomenclature, distribution, ecology, etc.

An important new component of this web version of WATTLE will be the inclusion of photographs (where available) of the species. Although we already have access to many photographs, our coverage is far from complete and a proportion are of poor quality. It is for these reasons that we are requesting assistance from ASG Members who may wish to submit photos for consideration for use in the new WATTLE project.

What we are looking for are good photographs that show the species growth form, the habitat in which it grows or close ups of various parts of the plant such as bark, leaves, phyllodes, flowers, pods, etc. Having the correct species name on the photograph is of seminal importance, therefore, we would prefer images that are backed-up with reliablynamed voucher specimens. However, it is recognized that there will be many good photographs in existence that do not have specimen vouchers. These photos would be acceptable to us so long as there is no doubt concerning the identification of the plant in question. The issue of reliability of identification is something that we can discuss with anyone who chooses to submit photos to us.

If you have photographs that you think may be of value to this project and wish to make them available to the project, they may be submitted to us either as digital images or as slide transparencies. Digital images can be either emailed or submitted on CD/DVD; transparencies will be scanned and then returned to the sender. Our contact details are provided below and it would be appreciated if you contacted us prior to sending photographs.

The photographs that will be delivered on the new WATTLE website will be sourced from various websites. However, those that we will present will be done so through the WorldWideWattle Image Gallery (<u>http://www.worldwidewattle.com/imagegallery/index.php</u>). On WorldWideWattle copyright for photographs resides with the photographer (whose name is shown at the bottom of each image) and each photograph is accompanied by the

following statement: "Use of photographs requires authorization (<u>please use our copyright permission form</u>)": by clicking this link the user is then referred to us for permission to use the image. Permission is never granted without the photographer's prior consent.

We feel that this new project offers a great opportunity to disseminate useful and reliable information concerning Australian Wattles. It is also an opportunity for you to display your images to a wide audience. Therefore, we look forward to hearing from any Member who would like to contribute to the project.

Atlas of Living Australia

The ALA is a collaborative partnership involving Australian museums, herbaria, biological collections, the CSIRO and the Australian Government. The Atlas is providing infrastructure and tools to enable researchers and other users of biodiversity information to find, access, combine and visualise data on Australian plants and animals. It will enable any user to quickly locate and access information across the Internet on all aspects of Australian biodiversity. As already noted there is a specific theme devoted to Acacia within the ALA. For information regarding the ALA, visit their website at <u>http://www.ala.org.au/</u>.

Contact details

Bruce Maslin (bruce.maslin@dec.wa.gov.au)

Jordan Reid (jordan.reid@dec.wa.gov.au)

Mail address: W.A. Herbarium, Department of Environment and Conservation, Locked Bag 104, Bentley Deliver Centre, Western Australia 6983

Footnote: In view of the revision of WATTLE we would be interested to hear from any Members who may have suggestions for improving the key. For example, you may have experienced problems keying out particular species or groups of species or there may be additional characters that you think would be helpful in the key. Of course we are also keen to know of specific errors (e.g. typographic and/or data errors) that you have found. We will provide focus to these matters during the revisionary process.

Wattle Day Centenary by Terry Fewtrell

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Terry Fewtrell is President of the Wattle Day Association and has provided the following short story on this year's Wattle Day Centenary celebrations.

The centenary of Wattle Day was celebrated with great enthusiasm in 2010. Around the country groups marked the occasion with various events and celebrations. A strong focus was given to the historical associations of Wattle Days past. From Perth to Broken Hill and the Sunshine coast, Australians marked the day and the symbolism of Wattle as our national floral emblem and symbol of national unity. In Canberra school children presented wattle to the Governor-General, more than 100 wattle enthusiasts attended the Centenary dinner and a special Citizenship Ceremony was held to mark the significance of the day and its appropriateness for welcoming new citizens. The President of the Wattle Day Association addressed the gathering of 80 new citizens and their families. A copy of his address is set out below.



To mark the centenary year, the Wattle Day Association formed an alliance with the Brigades Association of the ACT Rural Fire Service to produce and sell centenary badges. The project was promoted under the banner: 'Celebrate an aussie icon and help an aussie mate'. The badges were a great success, being produced by Association volunteers and sold throughout the ACT by the Brigades. Samples of the badges accompany this story. The efforts resulted in close to \$5000 being raised, all of which was donated to the brigades, and in the process invoked the great tradition of linking Wattle Day with community causes. The Wattle Day Association plans to build on this year's success by extending the partnership with the brigades to include NSW and ultimately nationally. The partnership is a great fit and links National Wattle Day with a community group on which all Australians rely. Further detail on this year's events can be found at the Association's website: www.wattleday.asn.au



Welcome Speech to new Australian Citizens on National Wattle Day

There are two words that I want especially to say to you today:

Congratulations and Welcome.

Congratulations on become citizens of Australia and welcome to the Australian family.

But I also want to point out to you how extraordinarily lucky you are to become Australian Citizens today, National Wattle Day. Wattle is Australia's national flower, our national floral emblem. Each year on 1 September we celebrate National Wattle Day, as Wattle is a symbol of our nation and National Wattle Day symbolises the unity of all Australians and our land.

Wattle is the blaze of golden colour that lights up our land each year at this time. The colours of our nation, Green and Gold, come from the green leaves and golden blooms of the *Acacia pycnantha*, one of more than a 1000 varieties of wattles that flower at all times of the year across our land, but especially at this time. And by becoming citizens of Australia on Wattle Day, you will be reminded each year of this day and your commitment to your new home, Australia.

Wattle has waited a long time to be the emblem of modern Australia. Indeed wattle has waited tens of thousands of years, being a remnant species from the ancient continent of Gondwanaland. And it has waited for you. It has waited to welcome you to this community of the peoples of Australia. The many varieties of wattle are like the many different types of backgrounds that make up that Australian community and are represented here among you today. Wattle is as diverse as are your backgrounds and heritage and yet wattle is the symbol that binds us together as Australians and citizens of this land.

Each year National Wattle Day will remind you also of the resilience of our land and people. Wattle is the first plant to grow again and flower after the ravages of bushfires in the Australian bush. As you make your way in this new land and play your part in the Australian story, remember that resilience. Remember that even though things may be tough at times, you have within you the strength to prevail and flower in this new land. Let National Wattle Day each year remind you of these things and the day that you willingly committed yourself to Australia and in return received the warm embrace of the Australian community.

And remember too that although some varieties of wattles may, at times appear scrawny and unimpressive, they will surprise and delight you at wattle blossom time. So also it may be with your fellow Australians. We all have potential. We all have our own beauty and we value and respect all.

So on behalf of my fellow Australians, congratulations and welcome to the Australian community on this National Wattle Day. May your fortunes blossom like the golden blooms of our wattle. And may you always remember, reflect and rejoice each year at wattle time on this day and your commitment to becoming Australian citizens.

Congratulations and Welcome. And happy Wattle Day.

Terry Fewtrell President Wattle Day Association Citizenship Ceremony Canberra National Wattle Day, 1 September, 2010

Acacia plicata

In a recent conversation with **Diana and Brian Snape** (Hawthorn East, Vic), they referred to an Acacia growing in their garden that they regard very highly, but which these days they seldom see in cultivation (at least down here in Victoria). The plant they referred to was *Acacia plicata*. Diana subsequently provided the following notes on their plant:

"We bought our *Acacia plicata* from Austraflora Nursery and it was planted in September 1982, so it's now 28 years old. It's an attractive low shrub growing underneath the north-west corner of a *Leptospermum polygalifolium* (formerly *L. flavescens*), so partly shaded by that and from the west by a nearby tree. It's a little over a metre tall with a spread of over 1.5m at its widest, though it's a bit entangled with a *Pomaderris aurea* and it's certainly not symmetrical. It has lovely soft, rather ferny, grey-green foliage and flowers each year with bright yellow flower-balls."

In reviewing old Study Group Newsletters, this species appears to have been referred to only on infrequent occasions. In the 1980s there were a couple of brief references to its restricted natural distribution (in south western WA). In 1997 there was a report in relation to it having been grown successfully from cuttings (Diana Snape advises that she does not think she has ever tried taking cuttings from her plant, and doesn't think that her plant has ever set much seed). In 2004, we saw the first inclusion of this species in the Study Group seed bank, with a donation of seed from **Jean Merson** (Wy Yung, Vic).

Jean is still a Study Group member, and she advises that she no longer has an *A. plicata* as a result of moving house. She also does not think the plant that she had ever set much seed. She commented that *A. plicata* is very similar to *A. guineti*, with the main distinguishing feature being in the seed pods – *A. plicata* has a pleated seed pod, whereas *A. guineti* has a flat seed pod.

It does seem that there are a significant number of species of Acacia that are excellent garden plants, but which are just not readily available in the nursery trade – and *A. plicata* is one of these. Have any other Study Group members had experience in growing this plant?

Acacia imbricata

In our previous Newsletter No. 110, **Judy Barker** (Hawthorn East, Vic) referred to having collected seed from her single specimen of *Acacia imbricata*. She noted that she had sown this seed after heat treatment, and commented that if seedlings appeared, it would be another species that produces seedlings without cross pollination.

Judy has now provided the following update (23 November 2010):

"The acacia I referred to as "A. *imbricata*" duly flowered profusely and produced seed — a bit tatty-looking. Seed sown on 29 August this year (with a motley set of *Hovea* species) germinated about 6 weeks later. About 3 months after sowing there are 14 out of 50 in each of two pots. One pot had soil from beneath the shrub sprinkled over the seed mix, the other was treated with smoked vermiculite. That is probably not as good a germination as might be expected, but at least the seed was viable and that is the only such acacia we have in our garden or that I have seen in our exotic suburb.

The uncertainty about identification arose because an *Acacia tindaleae* label was found while weeding near the base of the shrub. Max McDowall, however identified it as *A. imbricata* with a hand lens and I have just found that it is a hairless shrub, and the phyllodes have raised central veins ending in glands.

It is easier to ID acacias than Tetrathecas."

Grafting Acacias by Phil Hempel (Diamond Creek, Vic)

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Phil Hempel is a member of the Acacia Study Group. Phil and his wife Diane have a three hectare property at Diamond Creek (just outside Melbourne) which includes 4000 individual plants. In early October the garden was open in Australia's Open Garden Scheme, and on 30 October it featured in the ABC's Gardening Australia program. Phil has propagated many of the plants that are growing in the garden, and he has had great success with grafting (and in fact he demonstrated the "wedge" method in the Gardening Australia segment). We asked Phil whether he has grafted any Acacias, and he has provided the following note. There hasn't been a solid case for contemplating grafting Acacia species to date as they all seem to grow readily from seed unlike Eremophilas and Grevilleas that grow in desert sand and cannot be successfully grown in heavy clays without grafting onto a suitable rootstock. Acacias however seem happy to grow anywhere, whether from the desert or elsewhere, the only sign of a difficulty is that some need to be staked to allow the roots of some species from completely different environments to get a good grip of the ground otherwise they tend to fall over.

On the horizon there are Acacias that are approaching the market that may need to be grafted. *Acacia leprosa* 'Scarlet Blaze' is a current plant that could be grafted to reproduce more, except that seed grown plants appear to mostly come true to colour. Also, *A. leprosa* can be grown from cuttings. This has removed the need to graft. A number of other red, orange and pink acacias are in the pipeline, one being an orange flowering *A. paradoxa* developed from a sport. This could mean its seeds will most likely revert to yellow. Grafting A. paradoxa would not be done by a faint hearted gardener as the spikes are a little disturbing to handle. Others as they come to market will be looked at to see if they need grafting.

If grafting is required on any of these Acacias, then the preferred method may be budding instead of the standard wedge graft. Budding is used on rose and fruit trees and is one of the preferred methods in mass produced ornamental trees. *Corymbia* 'Summer Red' and 'Summer Beauty' are grafted using the budding method with the secret in the success of the graft being the speed of the bud removal from parent plant and the insertion into the root stock. Apparently this needs to be done within three seconds to prevent oxidation of the material. The root stock would be the same species as the scion or bud.

Blessed Acacias

by Phil Hempel (Diamond Creek, Vic)

Recently my sister came to see me, all excited; she had been given a packet of Acacia seeds that had been blessed by the Dalai Lama on his last visit to Australia. Her expectation of success alarmed me, her "all things are wonderful and possible" attitude had to be addressed. The seeds were *A. pycnantha*, which was a relief as they grow readily. I tipped the seed into a saucer in front of her and counted them, there were six seeds. I explained that from six seeds she could expect maybe three successfully grown seedlings, I didn't want her hopes to get too high or for her to think that I, for some reason, would keep some of the seedlings for myself. I already have eight of them growing.

I was a bit surprised by the interest these potential plants generated and on a few occasions I had to refuse suggestions that I siphon off a plant to give to another interested party. As it turned out three seeds did germinate and were grown to plantable size. All the while I had to assure my sister that the three plants were doing well. Eventually the plants were delivered to her in Daylesford (central Victoria) and she delivered them to the Buddhist centre in the area. It appears that of all the seeds blessed by the Dalai Lama, these were the only known plants that had been grown and the Buddhist and all the members of the centre were very excited with the gift.

The Flavour of Wattleseed

"Aroma of crushed nuts, cereal-like and slightly rancid. A savoury wheat-biscuit flavour on the papate."

"Aroma of toasted coffee grounds, sweet spice, raisin and chocolate. A savoury flavour, black coffee and some bitterness."

Some research has recently been carried out with the aim of developing vocabulary for describing the unique flavours of commercially important native plant foods, this having been identified as a key priority for the Australian native food industry. Each of the native food samples was assessed by a panel of sensory experts, and descriptions were formulated as a result of the work done by these panels.

One of the native foods included in this research project was Wattleseed (*Acacia victoriae*). Two separate samples of Wattleseed were assessed by these panels, and the descriptions formulated by these panels are set out above.

The report setting out the results of this research project is available on the RIRDC website (<u>www.rirdc.gov.au</u>).

Reference: Defining the Unique Flavours of Australian Native Foods, by Heather Smyth, published by Rural Industries Research and Development Corporation 2010

Acacias as host trees by Wolf-Achim Roland. Solingen, Germany

by Wolf-Achim Roland. Solingen, Germany 10 November 2010

We read the article 'Insects and Acacias' in the recent Acacia Study Group Newsletter with great interest. My wife is an entomologist. During our holiday trips we often travelled to Southern Africa. I had to look for insects, which she then photographed. Many of the trees I searched were acacias – and I was often quite successful. Once looking so carefully I decided to look for myself, too, starting the hobby, I still have today: trees. My main interest is the acacias (see: <u>www.acacia-world.net</u>).

Because true acacias cannot survive in my home country only the so called "Acacias", which in fact are Robinias

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(*Robinia pseudoacacia*) - I then selected the beech family (Fagus) as a local interest.

But we continue to travel to Southern Africa. Combining our hobbies, we actually prepare a joint lecture for the "Friends of the Botanical Garden" Düsseldorf under the headline "Trees as a home for Insects in Southern Africa".

Of course the lecture will feature beetles, bugs and especially caterpillars feeding on trees; and the ant-acacias, a subject I already discussed here (see ASGN 98/2007). What I found highly interesting are the "houses" which the larvae of Psychid moths construct. Therefore, they are also called bag-worms. Sometimes they carry their bags with them. Generally they fix them on trees, and the female lives inside and normally does not move elsewhere. Here are three photos, showing such "housings" on acacias.



Two big Psychid-houses made from Acacia thorns



A much smaller Psychid–house on *Acacia mearnsii* in South Africa. *A. mearnsii* is planted for its tanning bark. The caterpillars are considered a pest.



and a different one hanging on a twig of Acacia karroo



The two photos above show an ootheca of the mantis Sphodromantsis lineola and the huge cocoon of a Lasiocampid caterpillar Gonometa postica on different Acacia mellifera in Namibia.



The above photo shows a Katydid (family Tettigoniidae) living on Acacia in South Africa and Namibia. His design helps him to hide between the leaves. His name: Acacia Katydid (*Terpnistria zebrata*).

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And the weaver birds, feeding on insects, construct their huge condominium nests from grass on a majestic *Acacia erioloba* on the border of the Namib desert in Namibia.

From Africa to Australia

Wolf's article above relates to Acacias as host trees in Africa, but they also serve the same role in Australia. In fact, Esther has found in her own garden in suburban Melbourne a number of "houses" for caterpillars. Some photos she has taken are shown below.





A. cognata

A. longifolia



A. terminalis

A handsome caterpillar

In our Newsletter No. 109 (June 2010), we included a photo taken by Esther of some eggs on an *Acacia cognata* 'Copper Tips' (Photo 2 on page 7).

Esther has now provided photos of the eggs hatching out and also the fully developed caterpillar.



Newly hatched caterpillars



Developed caterpillar

The species is *Chlenias auctaria*. It is a species that has been recorded as feeding on a number of different plants (including Acacias) – so that it is polyphagus. Adult females lay large egg masses (around 200 eggs) on the top of plants, the eggs being initially white then turning purple as they approach hatching.

The caterpillars are more handsome than the adult moths which are a grey colour.

Reference: http://lepidoptera.butterflyhouse.com.au/enno/auctar.html

Flowering Times

by Bill Aitchison

Maranoa Gardens is an Australian native garden at Balwyn, in Melbourne's eastern suburbs, which is owned and managed by the City of Boroondara. For nearly 4 years I have been compiling records, on about a weekly basis, of Acacias in flower in the Gardens. There are about 150 different varieties of Acacia in the Gardens.

A number of people have observed that plants are generally flowering later this year than last year. It therefore seemed timely to review the records of Acacia flowering times at Maranoa, to assess whether this general observation applies to these plants. The following Table notes the time at which flowers were first observed on 55 individual plants in the Gardens, in each of 2009 and 2010. The plants included are those that commenced flowering during the months of June, July, August and September, and which were well established in the Gardens with a regular flowering season.

Species	Date flowering		
	commenced		
	2009	2010	
aphylla	13 May	14 May	
acanthoclada	20 May	3 June	
podalyriifolia	27 May	14 May	
merinthophora	3 June	26 May	
beckleri	3 June	3 June	
willdenowiana	3 June	16 June	
flexifolia (1)	11 June	23 June	
flexifolia (2)	24 June	23 June	
baileyana purpurea	24 June	8 July	
delphina	1 July	3 June	
vestita	1 July	8 July	
lasiocarpa var sedifolia	1 July	3 Aug	
pravissima	1 July	3 Aug	
glandulicarpa	1 July	3 Aug	
macradenia	10 July	23 June	
baileyana purpurea (2)	10 July	20 July	
boormanii	10 July	20 July	
alaticaulis x parramattensis	10 July	28 July	
imbricata	10 July	28 July	
baileyana prostrate	10 July	3 Aug	
covenyi	17 July	20 July	
decurrens	17 July	28 July	
acinacea	17 July	13 Aug	
aspera	1 Aug	11 Aug	
ausfeldii	1 Aug	11 Aug	
euthycarpa	1 Aug	24 Aug	
gracilifolia	1 Aug	7 Sep	
verniciflua	11 Aug	3 Aug	
chinchillensis	11 Aug	11 Aug	
phasmoides	11 Aug	11 Aug	
williamsonii	11 Aug	11 Aug	
fimbriata dwarf)	11 Aug	17 Aug	

pravissima 'Cascade'	11 Aug	24 Aug
denticulosa	11 Aug	24 Aug
nigricans	11 Aug	24 Aug
wilhelmiana	11 Aug	24 Aug
verniciflua	11 Aug	31 Aug
rigens	11 Aug	7 Sept
paradoxa	11 Aug	7 Sept
leprosa	11 Aug	7 Sept
cognata	18 Aug	7 Sept
decora	18 Aug	20 Sept
redolens	18 Aug	20 Sept
pulviniformis	27 Aug	31 Aug
cognata 'Green Mist'	27 Aug	13 Sept
hubbardiana	27 Aug	13 Sept
montana	27 Aug	13 Sept
coolgardiensis ssp effusa	2 Sept	13 Sept
gemina	8 Sept	20 Sept
glaucoptera	2 Sept	27 Sept
montana	2 Sept	27 Sept
brownii	2 Sept	20 Sept
argyrophylla	8 Sept	20 Sept
triptera	8 Sept	27 Sept
glaucescens	18 Sept	11 Oct

Note: The dates shown above are the dates on which flowering was first observed. The actual date on which flowering commenced would on average be a few days before the dates shown.

Based on this sample of 55 plants, the average date at which flowering commenced in 2009 was 26 July, and for the same plants in 2010 was 9 August. Interestingly, this trend is most evident with the later flowering plants eg those flowering from July onwards.

This raises the question as to what factors contribute to the later flowering. In this regard, some different theories have been proposed:

Theory 1

Geoff Lay (Mont Albert, Vic) has observed later flowering in his own garden this year, and he suggests that it is due to the increased rainfall that we have had this year – he suggests that this means that plants are under less stress and therefore less pressure to flower. We have certainly had higher rainfall this year. For example, according to the rainfall records maintained by the staff at Maranoa Gardens, the total rainfall at the Gardens in the first six months of each of the last three years has been as follows:

Period	d Total rainfall (mm)	
January 2008 – June 2008	289.8	
January 2009 – June 2009	188.5	
January 2010 – June 2010	318.4	

Whilst the experience of 2010, compared with 2009, would suggest that later flowering coincides with higher rainfall,

this does not seem to be a valid conclusion if we allow for the experience in 2008. In 2008, rainfall at Maranoa from January to June was only slightly less than in 2010. Hence, if this Theory 1 is valid, it would have be expected that we would have had later flowering in 2008. However, this did not happen – the average date of commencement of flowering of the 55 plants in 2008 was 26 July (the same as in 2009).

Theory 2

Andrea Dennis, who is one of the staff at the Gardens, has suggested that the later flowering in 2010 is related to different sunshine hours – with reduced hours of sunshine resulting in later flowering.

The following Table shows the Mean daily hours of sunshine (recorded at Melbourne Airport, according to Bureau of Meteorology records) in May, June, July and August in each of the last three years:

	Mean Daily Hours of Sunshine		
	2008	2009	2010
May	4.0	4.4	4.9
June	3.7	3.7	3.8
July	4.5	5.1	3.7
August	4.7	6.0	4.5

It is noticeable that during July and August the hours of sunshine during 2010 was markedly less than in 2009, but with differences in May and June being less significant. This could explain why the later flowering of the wattles in 2010 applied especially to those that tend to flower in late winter and early spring, rather than those earlier in winter.

However, if we again look at 2008, this theory does not seem to be fully substantiated – hours of sunshine in 2008 were also less than in 2009, yet flowering times in 2008 were similar to those in 2009.

So, I am not sure that either Theory 1 or Theory 2 is supported by the experience over the three year period. It may well be that a combination of factors affects flowering times, and it is not as simplistic as the analysis set out above.

Seed Bank, and a Request

An updated list of species held in our Study Group's Seed Bank was included in our September 2010 Newsletter 110. Requests for seed should be directed to Esther.

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.

A request: In some parts of Australia at least, we are coming into the prime season for collecting seed from Acacias (and as suggested by Alan Gray on page 2, it may well be a "bumper season"). If you are in a position to collect seed, or have spare seed, please give a thought to our Study Group's seed bank. Esther would love to hear from you. Although we do buy some seed from commercial sources, our Group's financial resources are limited and we do rely heavily on donations of seed.

Study Group Membership

Acacia Study Group membership for 2010/11 is as follows: \$7 (newsletter sent by email) \$10 (hardcopy of newsletter posted in Australia) \$20 (hardcopy of newsletter posted overseas)

Subscriptions may be sent to: ASGAP Acacia Study Group Membership Officer 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)

NOTE: Annual membership fees for 2010/11 are now due, we would very much appreciate it if you could attend to this (or advise us if you do not wish to renew your membership).