



ASSOCIATION OF SOCIETIES FOR GROWING AUSTRALIAN PLANTS

ACACIA STUDY GROUP NEWSLETTER
No. 92 August 2004

Dear Members

Thanks to all those who have written letters or notes with their renewals. They are greatly appreciated. The sharing of experiences is a vital part of any Study Group so please keep your letters coming.

The prolific spring flowering of wattles is well and truly with us in SE Qld though the latest record 'dry' is causing flowers to be short lived in many areas.

The ASG took part in a community day at the Redcliffe Botanic Gardens on the 1st August where wattles were a feature. Don Perrin ensured that all visitors were given a sprig of wattle to wear and plants were available from a couple of participating groups. The ASG sold some plants and gave some away. The level of interest was high and many more small wattles could have been distributed. It was very gratifying to hear from a number of people how the present dry weather has caused them to decide to get rid of the foreigners in their gardens and grow only drought hardy natives. Acacias are obvious candidates.

My thanks to Fred Mazzaferri for his assistance at the display.

Among the visitors were a couple from Bosnia who were convinced that some wattles are native to their country. They described a festival where 'Mimosas' were featured as one of the first plants to flower in spring. Has any one else heard of this?

Photo Library

The photo library now includes almost a thousand images of acacias in nearly three hundred species. These await the addition of data before their inclusion in a web page and CD. Some of these are duplicates and some are not up to scratch so the number will be reduced. Unfortunately for many species there are only close up photos. A photo of the habit or shape of the plant is also important. If you have any photos/slides/digital images of acacias, please consider sending them to me for inclusion in the library. Your contribution will of course be acknowledged in the final document. With photos/slides your postage cost will be reimbursed and they will be returned. Bruce Maslin is also interested in photos for the Worldwidewattle web site – an extract from an email is included below.

My thanks to Margaret Moir and Anthony O'Halloran for photos received recently. These have been incorporated into the photo library. Margaret's photos and four of Anthony's are featured in the coloured plates. More of Anthony's will be included in future newsletters. Anthony sent an impressive collection of photos of acacias of the Pilliga on a CD and also a very attractive greeting card featuring *A.tindalea*.

Two members have offered to assist with the setting up of the photo library in its final form. Initially, I was hoping just to add the records of cultivation from the ASG archives leaving the reader to pick up general information about the plants from the many other sources available. On second thoughts that seems inadequate for the audience we are hoping to reach, though adding extra data makes the job much more intimidating. I have included a rough template of the data I would like to see added and would very much appreciate comments from members. Is this too much or too little? How else could data be added?

Any other offers of assistance would be greatly appreciated even if writing up only a few species is involved. Once the form of a template is settled, the addition of data becomes much easier.

Rough idea for a template

Specific name:	Common name:
Height:	Width:
Foliage -	<i>eg true leaves or phyllodes, size, colour</i>
Special Features -	<i>eg minnie ritchie bark, unusual pods</i>
Habitat -	<i>including soil types</i>
Successful cultivation –	<i>locations and soil types -</i>

Emails and Letters from Members

From **Bruce Maslin**, www.worldwidewattle.com

I am happy to get images in any format (slide transparencies, slide film or digital format; I don't want colour prints though) but I cannot guarantee that all will be posted to www (I only post a selection of the 'best' images). For images submitted to me I would ideally like to have the species name, where the photo was taken and who took the shot. All images selected for posting on WWW will give full credit to the photographer (who will retain copyright of the image)

From **Bonnie Addison-Smith**, SE Qld

This is the **final result of my seed testing**.

When testing, the variables were temperature and weather conditions. I raise seedlings in a shade house with automatic daily sprinkling, using a self prepared seed raising mix of sand, peat and perlite.

Over all a few more of the recent seeds germinated. Older seeds generally took a little longer. After germination the vigour of plants related only to weather conditions.

Seed planted in spring and autumn resulted in better germination and more vigorous plants up to three months

Many thanks to Bonnie for carefully recorded results using recent and old seed of five different species of acacias. All the preliminary trials have now indicated that the age of the seed does not influence the vigour of the subsequent seedling. The theory that older seed produces weak seedlings can probably be put to rest for the time being.

From **Bob O’Niell**, Vic

August is here and the wattles are really doing their thing. Over the past couple of weeks the show has increased its intensity to be the main show of the garden at present. I guess there would be 30-35 species in flower at the moment with more budding up nicely. Those not able to cope have largely departed so what remain are in fairly good shape. *Acacia beckleri* would have to be one of the best with the huge flower balls of a clear gold that really stand out. I have a couple of *beckleri* seedlings coming on, one from my plant and one from the Study group source so I will be able to compare. My wish is for even bigger flower balls. Yesterday there were a lot of bees on the plant, noticeably so.

The garden is filling up but there will be more wattles going in, mainly selecting the smaller species. Some are already in the tubes, including the *drummondii* subspecies plants, these will be put out once the weather warms up and in some cases once the plants grow somewhat.

From **Jeff Irons**, UK

With regard to your bank balance. There is a theory that your capital should be 9 times the annual subscription. However I am treasurer of a group with 63 members and an annual subscription of £6. The capital balance is £4600. I would like to see it at a level where the interest enables us to have free membership! This year we had income of £1600 and expenditure of £1300.

When last I tried *A. terminalis* it could not cope with our winters. With global warming in mind I've just germinated some seed that was collected in 1992. 5 seeds sown resulted in 4 seedlings. Last year's sowing of commercial seeds labelled *A. caerulescens* has produced healthy seedlings of *A. paradoxa*!

Jeff's query about the smell of acacia roots still has not had an answer but Marion Simmons commented on A.pataczekii which Jeff mentioned.

From **Marion Simmons**, Tas

With regards to *A.pataczekii*, Jeff Irons does not mention its suckering habit or maybe that doesn't occur in England. However here in its home state it tends to sucker vigorously, even to the extent of firstly cracking and then forcing up the bitumen seal in our carport! Hence we do not recommend it as a plant suitable for use in suburban sized gardens as suckers can reach 4-5 m from the parent plant.

Marion also sent a very interesting section on acacias from a book published in 1844. More about that in the next newsletter.

From **Leon Steinhardt**, SE Qld

I sent the article (from *Aub Podlich, SE Qld*) about the brigalow to a lady from West Moreton Landcare and this was the reply

'This article is right Arnold Reick says that you can't tell the difference you have to cut the tree. There is a lot of work to be done on Brigalow the Western Brigalow is different to the one grown here and it has a silver leaf colour.'

'Further to the Brigalow question I was told today that one Brigalow has dark bark and dark green leaves and the other Brigalow light green leaves and a whitish colour gets through the bark. Hope this answers you.'

Wouldn't it be interesting to find an example of each and record its full characteristics? Another local who is a teacher aide at school knows about the different brigalows but could not give me a reason for the difference. He said that the brigalow on the hills is different from that on the heavy soil flats so who knows?

From **Jean Merson**, Vic

I noticed you did not have any seed of *Acacia plicata* in the seed bank so although I only have a few seed I am sending them to you. I have also included some seed pods to show how it got its name ie pleated. It is very like *A. guinetii* except for the seed pods. I have also grown it from cuttings. It comes from WA in Hill River to Moora areas. Likes well drained soils but will withstand periods of wetness. Responds well to pruning after flowering. Can grow 1-2.5m x 1-3m. Will withstand light frosts- both plants I have seen have been in coastal gardens.

A. plicata pod from Jean



As I now live in town I only have two small wattles. *Acacia mitchellii* grown from a cutting from Providence Ponds and a dwarf *Acacia fimbriata* which I bought. My dwarf *A. fimbriata* has grown a bit bigger than I wished and I considered removing it, but then I noticed where I had pruned some branches last year new growth had shot out from the bottom, so after flowering it will receive a severe pruning and we will see what happens.

Jean is interested in obtaining seed of A. lucasii which is not in the seed bank. Does anyone have some seed they could spare?

From **Elizabeth George**, WA

I am not aware that *Acacia* plants are severely affected by predation under cultivation here in WA. Plants I have grown at Alexander Heights have not been and neither were those 20 or so species I grew at Lesmurdie in the Darling Range over a period of 15 years. A species of mistletoe attacked 2 plants of *A. podalyriifolia* and eventually killed one of them.

This is an update of my present acacias.

Last July I planted 1 x *A. glaucoptera*, 2 x *A. alata* (to replace those lost when a dead tree had to be removed) and 2 x *A. drummondii*. Both the *A. drummondii* died during the summer, one

planted in a north facing position and the other facing east. I think being placed in full sun, high on a rockery in sand did not allow their roots to penetrate deeply enough to stop them drying out. It may have been better to plant them in less exposed situations in a lower area that didn't drain so quickly.

A. merinthophora (10 years 7 mths) is almost 3m tall and was lovely in June although not as prolific as previously. Not surprising since it was heavily cut for flower arrangements and displays for about 10 years.

A. latipes (14 years 4 mths) is 20cm x 70cm, in full bud and regularly pruned away from a pathway.

A. boormannii (also 14 years 4 mths) is 3-4m, in bud and has produced one or two suckers occasionally which have been removed.

A. spathulifolia (14 years) is also in bud. It was almost smothered by a large bushy *Banksia sphaerocarpa* and later exposed with sparse foliage on the ends of long stems when the *Banksia* was removed after it suddenly died in Spring 2000. Careful pruning each year since then has restored the acacia to its natural, graceful weeping habit and in a few weeks it will be a delight to behold once again.

A. ?horridula (45cm x 45cm) was planted in July 2001 and is also ready to flower.

A. lasiocalyx (14 years 8 mths) has really surprised me by developing into a small tree 5-6m tall. It flower prolifically each September-November.

ACACIA NEWS

The important news at present for wattle lovers is that a step has been taken towards the retention of the generic name *Acacia* (instead of *Racosperma*) for most Australian wattles. This is the start of a process which will hopefully ensure that the name acacia retains its position in Australian tradition. See below.

Most Australian Wattles likely to remain *Acacia*

Bruce Maslin¹ & Tony Orchard²

¹Department of Conservation & Land Management, Locked Bag 104, Bentley Delivery Centre, Western Australia 6983

²Department of Environment & Heritage, GPO Box 787, Canberra, ACT 2601

Readers will most likely be aware of the proposal made last year that the generic name of *Acacia* be conserved with a new Type species chosen from the 'Australian group' of the genus (Orchard & Maslin 2003). Discussions and references concerning this proposal may be found at the following web address: <http://www.worldwidewattle.com/infogallery/taxonomy/>.

The proposal has now been considered by an international panel of nomenclatural experts, the Committee for Spermatophyta, which is a specialist committee of the International Association for Plant Taxonomy (IAPT). The Secretary of that committee, Dr R. Brummitt, recently informed us that the committee has voted to accept the Orchard & Maslin proposal. An official report detailing the reasons for the committee's decision will be published in the journal *Taxon* (probably in the August 2004 issue). In the meantime we have been given permission to make the report available so it has been posted on the WorldWideWattle website at the above address.

It should be noted that the Spermatophyta Committee's decision does not become binding until it has been endorsed by the General Committee of IAPT and then ratified at the International Botanical Congress in Vienna in July 2005.

The Orchard & Maslin action was triggered by the stated intentions of some workers to subdivide *Acacia* into a varying number (about five) segregate genera. If the resultant genera were named in accordance with the original Type species of *Acacia* (*A. nilotica*, syn. *A. scorpioides*) it would mean that most of the Australian Wattles (some 948 species from a total of 957 species currently recognized for this continent) would most likely become known as *Racosperma*. Of the 390 or so species that occur outside Australia roughly half would remain *Acacia*, namely, about 60 from a total of 185 in the Americas, 73 from a total of 144 in Africa and 36 from a total of 89 in Asia. In these three regions most of the remaining species would become *Senegalia* except that in tropical Asia there would be ten species of *Racosperma* and in the Americas 28 species would be distributed between two small endemic genera.

The strategy proposed by Orchard & Maslin to move the Type species to the phyllodinous species *A. penninervis* Sieber ex DC. would mean that if (when) *Acacia* is dismembered, the name *Acacia* will remain with the by far largest group of about 960 species comprising the 948 Australian species mentioned above plus 10 in tropical Asia, seven in the Pacific and one or two in the Madagascar region. The 73 African, 60 American and 36 Asian species mentioned above, plus 7 Australian species would become known as *Vachellia*. The African, Asian, American and Australian species destined for *Senegalia* (and the two minor segregate genera from the Americas) would be excluded from *Acacia* irrespective of the Orchard and Maslin proposal. This new generic arrangement is shown in the following table.

Table 1: Species numbers for the five genera that will probably be recognized following subdivision of *Acacia sens. lat.* (these numbers follow those given in Maslin, Orchard & West 2003). Generic names (column 1) are those that apply following acceptance of the Orchard & Maslin proposal.

Genus	Numbers of species				
	Americas	Africa ¹	Asia	Australia & Pacific	Total
<i>Vachellia</i>	c. 60	73	36 (incl. c. 15 also found in Africa)	7	161
<i>Senegalia</i>	97	69	43 (incl. 7 also found in Africa)	2 (incl. 1 also found in Asia)	203
<i>Acaciella</i>	15	-	-	-	15
<i>New genus</i>	13	-	-	-	13
<i>Acacia</i>	-	2 ²	10 (incl. 7 also found in Australia)	955 ³	960
Total number of species	185	144	89 (incl. c. 29 occurring also outside the region)	964 (incl. 1 also found in Asia)	1353

¹Includes Madagascar, Reunion and Mauritius.

²2 species in Madagascar, Reunion and Mauritius. (Note: Du Puy & Villiers 2002 consider that only one species of this group occurs in this region.)

³948 species in Australia; 7 species in the Pacific.

What does this mean for Australian *Acacia* nomenclature? Until a formal proposal to dismantle *Acacia sens. lat.* is published, nothing will change, anywhere. If and when someone formally publishes a proposal that, *inter alia*, separates *Acacia* subgen. *Phyllodineae* from the rest of the genus, then this decision means that the name *Acacia* follows its new Type species into the old *Phyllodineae*. For Australian taxonomy, this means that, apart from 9 species which will become *Vachellia* and 2 which will become *Senegalia*, the rest (975 species) remain as *Acacia*.

The above text is a slightly modified version of a paper by Orchard & Maslin, titled *Australian Acacia to (mostly) remain Acacia*, that has been submitted for publication in the next *Australian Systematic Botany Society Newsletter*.

References

Du Puy, D. and Villiers, J.F. (2002). *Acacia*. In 'The Leguminosae of Madagascar'. (Eds D.J. Du Puy, J.N. Labat, R. Rabevohitra, J.F. Villiers, J. Bosser and J. Moat) pp. 750. (Royal Botanic Gardens, Kew: London.)

Maslin, B.R. (2004). Response to Walker and Simpson's views on the ICBN Proposal 1584 by Orchard and Maslin to conserve the name *Acacia* with a conserved type: ASBS Newsletter 117: 17–21 (2004). *Newsl. Austral. Syst. Bot. Soc.* 118:15–19.

Maslin, B.R., Orchard, A.E. and West, J.G. (2003). Nomenclatural and classification history of *Acacia* (Leguminosae: Mimosoideae), and the implications of generic subdivision. Web publication at: <http://worldwidewattle.com/infogallery/taxonomy/nomen-class.pdf>

Orchard, A.E. and Maslin, B.R. (2003). Proposal to conserve the name *Acacia* Mill. (Leguminosae: Mimosoideae) with a new type. *Taxon* 52: 362–363. [This article can be accessed via the WorldWideWattle website at <http://www.worldwidewattle.com/infogallery/taxonomy/>]

Walker, J. and Simpson, J. (2003). An alternative view to ICBN Proposal 1584 to conserve the name *Acacia* (Leguminosae: Mimosoideae) with a conserved type. *Newsl. Austral. Syst. Bot. Soc.* 117: 17–21.

Seed Bank

Thanks to Jean Merson for seed of *A.plicata* which is a new addition to the seed bank.

The seed bank is in the process of moving to a new home – in bar fridges. In spite of the liberal use of naphthalene, moths and their larvae still occasionally turn up in the stored seed during the hot months. I am not happy with idea of using a long acting pesticide for obvious reasons so storage in fridges is the best way to go. The seed bank is the ASG's major asset with over 550 species and subspecies of acacia seed, some habitat collected 35 years ago.

I have donated one bar fridge and a second used one is to be purchased for \$30. The money for this was raised at the Redcliffe Botanic Gardens Wattle Display mentioned above. The problem arises of what happens when the leadership moves on, perhaps to a very distant area where transporting the fridges would not be an option. All I can suggest is that the fridges are sold and the money put towards storage of seed in the bank's new home.

Welcome to New Members

Tony and Brenda Moore from Park Orchards, Vic.

ASGAP Acacia Study Group Financial Balance Sheet 2003-4

The finances of the group remain healthy with an increase in funds over last year's total. Some of this is due to the payment of subscriptions for a year or two in advance and some is due to donations. There has been yet another increase in the cost of colour photocopying but this is offset by the subscriptions of members who elect to receive their newsletters by email. The text of the newsletters is printed on my laser printer which is cheaper than photocopying.

Income

Balance at 30-6-03	\$763.84
Income from subscriptions and donations	\$759.00
Interest	\$3.26
Total	\$1526.10

Expenses

Postage	\$120.00
Envelopes and paper	\$34.00
Seed	\$47.00
Colour photocopying	\$261.25
Toner-Black and white (part cartridge)	\$60.95
Bank debits	\$3.40
Total	\$526.60

Balance at 30-6-04 **\$999.50**

Coloured Plates (1 to 4)

From **Margaret Moir**, WA (with comments from the ASG records in italics)

Firstly, the sandpaper wattle, *A. denticulosa*, (**Plates 1 & 2**) which is coming up for 2 years old for me. Aprox 3m tall, an open upright shrub. Rare and endangered in its natural habitat of the northern arid wheatbelt. Only a few plants left in the wild I think, on granite outcrops. Incredible how healthy it is for me, accepting 1400mm rain annually and infinitely cooler and more humid summers. Fascinating foliage, really rough, huge leaves up to 10cmx8cm, very attractively netted with veins. The pics show the leaves and the wiry stems, the form, and the rod like buds. Not in flower yet, I'll get another snap when it is. Seems to have very productive nectaries, feral bees and native ants are attendant on the leaf axils all year. [oddly, not the native bees]

According to the ASG records this seems to be an adaptable species which grows well as far north as inland SE Qld in soils as variable as sand and clay. One comment suggested that growth was better in heavier soil.

Second, *A. merinthophora*, (**Plate 3**) which I call the zigzag wattle, although I know you have another that goes by that name in the ES. Comes from roughly the same region, but is more

widespread. An exquisite shrub, up to 4m, wispy and weeping. Thin wiry phyllodes, come out at zig zaggy angles. Blooms very early, started in May, lovely resinous "bush honey" perfume. First time flowering for me, and I will make a point of collecting seed. Easily one of the prettiest foliage plants you could see, even without any flower. Once again, happily accepting extremely different conditions from its native habitat. No worries about how long and dry the summers are!

Not many records for this beauty in the ASG archives. Though it is native to Margaret's area I do know of it growing successfully in a number of areas of SE Qld so it must be fairly adaptable.

Lastly, (**Plate 4**) found this gorgeous ghost or swift moth one autumn evening. Very large, snowy white body, turquoise face and legs. It is a male of the genus *Aenetus*, family Hepialidae. Found just the wing of a female, which is quite different, green wings with pink stripes. Apparently this species does a job on Acacias, the eggs being laid in the ground, and the larvae boring into the roots and stems. Haven't found a pupa yet, but have had 2 *A. fimbriata*, 1 *A. howittii*, and several branches of *A. floribunda* die, so I have my suspicions as to the culprit.

Coloured Plates (5 to 8)

From **Anthony O'Halloran**

I am live near the Warrumbungles, north central NSW, and have a number of images of our local wattles. These wattles are prominent in the area with 65 species in the Pilliga to the north of us and 43 in the Goonoo forest to the south. I am in the process of getting photos of them all!

What a great project! Four of Anthony's photos from the Pilliga are included here and more will be featured in the next newsletter.

Plate 5 *Acacia sertiformis* habit

Plate 6 *Acacia sertiformis* close up of phyllodes and flowers

According to the 'Wattle' disc this species has a discontinuous distribution from Barakula in SE Qld to the Goulburn River valley in NSW usually on stony, sandy soils.

It grows to 2m.

There are no records of its cultivation in the ASG records

Plate 7 *Acacia tindaleae* - habit

Plate 8 *Acacia tindaleae* - close up of phyllodes and flowers

According to the 'Wattle' disc this species occurs on the western slopes and plains of NSW from Cuttabri to Dubbo and is common in the Pilliga Scrub. It is rare in SE Qld. It grows in sand with *Eucalyptus* and *Callitris*.

It is a compact, spreading shrub to 2m.

The two records in the ASG archives (one from Vic and one from Brisbane) suggest that this species can cope with clay. It is growing well at Kingaroy in a pile of subsoil (light clay) as well as in shallow sandy soil over clay and granite. The species appears to be drought hardy and has coped with temperatures of – 4 degrees. One plant is flowering profusely at less than 1m in height.

A very attractive species that deserves to be more widely grown.

