



**ASSOCIATION OF SOCIETIES FOR GROWING
AUSTRALIAN PLANTS**

ACACIA STUDY GROUP NEWSLETTER
No. 90 February 2004

Dear members

A belated 'Happy New Year!'

This new year has brought good rains to many parts of the east coast and hinterland that had been in drought. In the areas around the SE of Qld, that I see regularly, the transformation of the landscape has been dramatic. It is tempting to think that this is a return to normality when it is really just one end of the pendulum swing in the constantly changing weather patterns. The present heatwave is drying out the soil quite rapidly but at least we have a breathing space before the next 'dry'.

A number of acacias at Booie are putting on brilliant displays to show how much they are enjoying the improved conditions. These include *A. complanata*, *conferta*, *disparrima*, *leptoloba*, *loderi*, *simsii* and *subulata*. On the down side, some have not coped with the excess water and heat combination - these include some *A. paradoxa* and *leichhardtii*.

The Lowood – Fernvale Rail Trail

Fortunately the rain came soon after the initial plantings of acacias along the Lowood – Fernvale Rail Trail. This is a project which I first mentioned a year ago in the Feb 2003 newsletter. The trail follows the former Brisbane Valley Railway Line and is located about an hour's drive north west of Brisbane. The plantings of acacias will continue into the foreseeable future with new species of *Acacia* and new areas being planted progressively. Another batch of 100 seedlings is almost ready to go and seedlings at different stages are in the pipeline. In years to come this should be a terrific showcase for acacias.

Leon Steinhardt, who initiated the project and is the driving force behind it has set up two web sites dealing with the trail. The addresses are listed below. I have included a few photos from the many on the websites for those who are not on line. These give an idea of what the trail is like at present.

<http://lowoodshs.eq.edu.au/home/cweb1/sose/events/wattles.html>

<http://home.graffiti.net/qland/html/railtrail.htm>

From the previous pages web sites

Planting Wattles along the Rail Trail

In the last week of the 2003 school year a small group of students from Years 8 and 9 assisted workers from the Esk Shire Council to plant 100 wattles along the Lowood - Fernvale Rail Trail. The wattle plants were kindly donated by the Acacia Study Group of The Society for Growing Australian Plants (SGAP)

The official opening of the railway line to Lowood occurred on 16th June, 1884. The line closed in the 1990s.

South-east from the station, at an old underpass, is the Lowood end of the rail trail. There are two designated paths, one for horse riders and the other for walkers and cyclists



A clump of *Acacia salicina* at the eastern end of the trestle bridge



Brigalow trees on top of the cutting at the western end

Another view of *Racosperma*.

Les Pedley

Some members of the Society are concerned about the transfer of names of Australian acacias from *Acacia* to *Racosperma*. I have now made these transfers in a recently published paper. I listed 981 species of *Racosperma*, only ten of which do not occur in Australia. This necessitated changing the names of 702 species.

I have been a taxonomist long enough to know that botanists, both amateur and professional, dislike having to change names of plants, especially plants commonly cultivated and widespread in Australia. The changes will certainly be disruptive, but I believe the process begun in 1986 must continue. I have two main reasons for adopting this attitude. Restriction of the name *Acacia* to Australian species would be contrary to the spirit, if not the letter, of the internationally accepted code regulating the formation and application of botanical names. And, a factor often overlooked, countries that can ill afford to do so will have change the names of about half their acacias quite unnecessarily.

Under the internationally accepted code, it is possible to restrict the name *Acacia* to the Australian species. The type species of the genus is, effectively, *A. nilotica*. Though it was first recognised as belonging to the genus in 1813, it was described by Linnaeus in 1753 (as a species of *Mimosa*) and was known to Miller when he described the genus *Acacia* in 1754. Miller did not adopt Linnaeus's binomial classification at the time so he cannot be considered to have transferred the epithet from Linnaeus's *Mimosa* to his *Acacia*. Though he took a broad view of *Acacia*, his concept could not have included any of the "Australian group" of species. Miller died in 1771, 18 years before the first Australian species to be formally recognised was described as *Mimosa verticillata* (1789). It would be bizarre if the type species of the

genus *Acacia* should be changed to a species belonging to a group unknown to the man who described the genus. This is what is now proposed.

A formal proposal has been made to abandon the name *Racosperma* completely and to preserve the name *Acacia* for the Australian acacias. The type species would become *Acacia penninervis*. A nomenclatural committee of the International Association of Plant Taxonomy will consider the proposal. The committee consists of 15 botanists, six from Europe (two from the United Kingdom, one of them the secretary), four from North America (all from the United States), two from Asia (Japan and the Philippines), one each from Australia, South America and Africa. Ten assenting votes are required for the proposal to be accepted. I would be surprised if a majority of members of the committee does not hold views similar to mine and will therefore reject proposal. Unfortunately the committee can take as long as it likes to make a decision.

Of course the question of disruption is a serious one. In the March 2003 issue of **Growing Australian**, Dick Burns noted that many were relieved when the earlier *Acacia/Racosperma* shift did not eventuate. If the evidence for the proposed split had been objectively examined at the time, *Racosperma* could now be well established in botanical literature. The circulation of a number of dodgy arguments, some of which are still about, halted it. Some of them were: *Racosperma* might not meet the requirements of the code for proper publication; not enough was known about the internal classification of *Acacia* as a whole and perhaps more genera would have to be recognised in Australia; the abominable name was neuter, and so on. Most of them seem to have been withdrawn but, ironically, one of the main arguments now advanced for the rejection of *Racosperma* is that *Acacia* has been adopted in the **Flora of Australia**. The *Acacia/Racosperma* question should have been resolved well before the **Flora** had reached the editorial phase.

Preserving the name *Acacia* exclusively for Australian species smacks somewhat of jingoism, inverse colonialism, of a sort. Australia is in a great position. It is a rich country with a well educated botanical public that can absorb name changes with a minimum of fuss. We have a fine up-to-date account of Australian acacias (Vol. 11A & B of the **Flora**) which will be a standard text beyond our lifetimes, regardless of the outcome of any proposal. The large number of Australian acacias on a single land mass is a huge advantage. When the few naturalised introductions are excluded, the chance of being wrong when identifying an acacia from Australia as *Racosperma* is only one per cent. On the other hand, the rest of the world will not only have to abandon the name *Acacia*, but will have to accept transfers of species to at least two genera, both with unfamiliar names. The lovely flat-topped trees of the African veldt will be *Acacia* no more, but *Vachellia*. About an equal number of African species will go to *Senegalia*. The situation in Asia is similar though only about half as many species are involved. The situation in the Americas is worse. There may be about 200 species (the South American flora is not well known), slightly more than in Africa. Half will go to *Senegalia*, most of the rest to *Vachellia*, some to *Acaciella*, and a small residue to a genus, recognised recently but not yet formally described or named.

Name changes are inevitable but the monetary cost of a change to *Racosperma* has been greatly exaggerated. In a Sydney Morning Herald article of 9th November 2002, the cost of changing names on 40 000 herbarium specimens was estimated at

\$500 000. This is an impressive but extravagantly high figure. No one should be overly concerned about the change in gender. *Racosperma dealbatum* and *Acacia dealbata* are palpably the same, as are *R. penninerve* and *A. penninervis*. Slightly more than a quarter of the epithets have not changed at all. I cannot imagine that “racosperma” would ever be adopted as a common name, but the common names “acacia” and “eucalypt” will continue to describe the predominant elements in the Australian flora. The names of the great majority of Queensland species are already listed under *Racosperma* in the index to the **Flora**. While awaiting the outcome of the proposal to proscribe the name *Racosperma* we could perhaps consider changes of the names of other Australian plants. The sky did not fall in when large parts of *Eugenia* became *Syzygium* or *Cassia* became *Senna* or *Eucalyptus* became *Corymbia*. And I doubt that it will fall in when Australian acacias become *Racosperma*.

In fact, since all species of *Racosperma* have valid names in *Acacia*, anyone is free to disregard the results of recent molecular research and continue to use the name *Acacia* for all species, American, African, Asian and Australian.

Proposed name change for Acacia: update

Bruce Maslin

Just before Christmas 2003 Les Pedley (Queensland Herbarium) published a paper in the journal *Austrobaileya* (vol. 6, no. 3, pages 445-496) in which the remaining combinations for relevant Australian Acacias were made into *Racosperma*. My note here is to inform you that at this stage it would be inappropriate to adopt these *Racosperma* names, for reasons that I will now explain. Last year Tony Orchard and I published a proposal to conserve the name *Acacia* with a new type (Taxon 52: 362-363, 2003). If successful then we will all be able to continue using the name *Acacia* for most Australian Wattles. Our proposal, along with various other documentation, was formally submitted last December to the International Committee for Spermatophyta who will recommend on our case. We now await their decision. The International Code of Botanical Nomenclature recommends that while matters such as this are under consideration by the relevant committee, the status quo should apply (St Louis Code, Recommendation 14A.1). In other words, the Code in this case would recommend that we should continue to use *Acacia* rather than adopt *Racosperma*, pending a decision by the Committee. I hope that the Committee will be able to make their (very difficult) decision before about the middle of this year. In the meantime it would be best to simply ignore Pedley's paper insofar as the generic name *Racosperma* is concerned. I will keep you informed.

Bruce Maslin

Dept. Conservation and Land Management, Perth.

31 Jan. 2004

Seed Bank

Comparing the vigour of some Acacia seedlings from old and recent seed.

Bonnie Addison-Smith has sent the results of very detailed trials with old (17 to 29 years) and recent (1 to 2 years) seeds of five species of *Acacia* – *Acacia chinchillensis*, *doratoxylon*, *falcata*, *juncifolia* and *vicidula*.

Her conclusions follow

Since I received the seeds close to winter I began planting but generally try to avoid any winter activity. I intend to plant some seeds in each season as an added test. These are the results for winter and spring.

On the whole the older seeds are doing as well as, if not better than, more recent seeds. I am of the opinion that the quality of the seeds and therefore the vigour of the plants would reflect the climate of the source plant during the previous year – good year, nutritious seeds, good plants. This would be impossible to test except on an individual basis unless some detailed data has been collected.

Hazel Kelly sent a variety of *A. neriifolia* seed. This was collected and packaged separately from plants with different coloured foliage – green, blue green, grey and very grey. It will be interesting to see if the seedlings match the adult plants. Hazel also mentioned maggot like grubs which emerged from the seed pods that had been split and left over night. I haven't managed to raise any of these yet but they are certainly a major source of annoyance to anyone collecting seed. The number that emerge from pods left in the sun for a short time give an indication of how much seed will not be viable. Often the percentage is quite high.

Membership

Welcome to new members

Aub Podlich, 2 Matthew St, Boonah 4310

Don Perrin, 22 Church St, Kippa-Ring 4021

Don Perrin is the author of 'The Dictionary of Australian Botanical Names', painter, producer of 'Bushland Stickers' and manager of the Redcliffe Greening Australia Community Nursery.

A Horticultural Surprise.

By Warren Sheather

Last century we purchased a number of *Acacia* seeds. Included in our purchases was a packet of *Acacia mabellae* seeds. The reason for our purchase, of this species, is lost in the mists of time. A number of seedlings were raised and these were planted throughout our garden.

The plants pleasantly surprised us as they matured. *Acacia mabellae* has developed into a spreading shrub about two metres tall with pendulous growth habit. Mabel's

Wattle has two appealing features. The long phyllodes are an eye-catching feature. They are narrow-lanceolate in shape and are over 20 centimetres long. They are the longest phyllodes of any of our cultivated Acacias. The flowers are another striking feature. They appear in spring, globular in shape, bright yellow in colour and are about one centimetre in diameter. The blooms are carried in axillary racemes. Visitors, to our garden, frequently ask about this species even when it is not flowering.

Acacia mabellae is a native of the South Coast and Southern Tablelands of New South Wales.

See coloured plate No 1

Acacias at Yallaroo

Yallaroo is the name of our property, west of Armidale, on the Northern Tablelands of New South Wales. Our house and surrounding gardens are perched on a windswept hill at an altitude of about 900 metres. Originally this site was a large sheep camp complete with Horehound, Stinging Nettles and almost every thistle species known to science. In the past eight years the weeds have given way to extensive gardens that are home to a large range of native plants including at least 50 different Acacias. Our area is prone to frosts and we are either in, coming out of, or going into drought.

We have overcome our weed, frost and drought problems by heavy mulching with sawdust and dense planting. Each planting hole accommodates two and sometimes three plants. The holes are spaced between 50 centimetres and one metre apart. Finished garden beds have a bushland appearance with many species and varieties sheltering and protecting each other. We are able to garden in this manner because we propagate most of our plants. The majority of plants are tube stock. Acacias play an important role in our horticultural activities. Most have proved to be hardy, fast growing; free flowering.

New species are being added on a regular basis. Most Acacias are propagated from seed although we are having some success with cuttings.

Seven Acacias are native to Yallaroo. These are: *brownii*, *buxifolia*, *implexa*, *lanigera*, *neriifolia*, *rubida* and *viscidula*. We are hopeful that other species may regenerate now that cattle and sheep have been removed from the property. Yallaroo was heavily grazed in days gone by and in during this time many native plants made a temporary exit.

Acacia neriifolia is a tall shrub and Yallaroo is almost at the species eastern limit. They are very prominent on the surrounding hills during the spring flowering period.

There were very few *Acacia implexa* when we first acquired Yallaroo. Now there are literally dozens on our 64 hectares. This Hickory Wattle flowers in mid-summer so we consider it to be an 'out of season' Wattle because it does not flower during the normal spring period. Light yellow flowers light up our bushland.

Acacia viscidula, Sticky Wattle, has also regenerated in large numbers. This medium, upright shrub produces pale yellow flowers in October. *Acacia viscidula* favours rocky outcrops.

Acacia acinacea is an introduction to our gardens. It is known as the Gold Dust Wattle and occurs in South Australia, Victoria through to central New South Wales. The Gold Dust Wattle is a bushy, upright shrub and reaches a height of one and a half metres. In spring the plants become covered with golden flowers and at this time the plants live up to their common name. Propagate from seeds and cuttings.

See coloured plate No 3

Acacia boormanii, the Snowy River Wattle, is one of our favourites and we have planted many specimens. This eye-catching species comes from the Snowy River area of Victoria and New South Wales. *Acacia boormanii* is a medium, multi-stemmed shrub with grey-green foliage. Bright yellow flowers, in globular heads, appear in spring. This Wattle almost glows during the flowering period. Foliage and flowers are attractive features. The Snowy River Wattle often suckers. We have some mature plants that are surrounded by suckers. These form a glowing specimen clump in spring. Propagate from seeds and cuttings.

See coloured plate No 2

Acacia caesiella is known as the Blue Bush and is a tall shrub. At Yallaroo the Blue Bush reaches a height of three metres. The phyllodes are narrow with a slight curve and fine point. They have a blue bloom hence the common name. Yellow globular flowers are produced in spring. *Acacia caesiella* could be cultivated in native hedgerows and as a foreground shrub in windbreaks and shelterbelts. It occurs naturally in the Central Tablelands and Western Slopes of New South Wales. We have fond memories of the Blue Bush from our sojourn in the Warrumbungle National Park where it grows prolifically.

See coloured plate No4

Our web site has a new address: www.yallaroo.com.au

Coloured plates

Thanks to Warren and Gloria Sheather for the following photos taken on their property at Yallaroo

Plate 1 *A.mabellae* See article above.

There are no records of the cultivation of this species in the ASG's archives.

Plate 2 *A.boormanii* See article above.

There are many records in the ASG archives of the cultivation of this species but most are from Vic. Obviously it is very adaptable to different soil types in that area as it has grown well in soils ranging from clay to fine sandy loam

Plate 3 *A.acinacea* See article above.

The ASG archives have many records which suggest an adaptable species. Healthy plants are recorded growing from southern Qld to Vic in a wide variety of soils from fine, alkaline beach sand to sandy loam and clay. Well drained and water retentive sites have also produced healthy plants

Plate 4 *A.caesiella* See article above.

There are no records of the cultivation of this species in the ASG archives.

Plate 5 *A.subulata*

The following is from an article by Warren and Gloria Sheather appearing in ASG Newsletter No 80

Acacia subulata, the Awn Wattle, is one of our favourite native plants. Acacia subulata is a tall shrub with upright growth habit and bright yellow flowers. Flowering occurs for most of the year except in spring when the other wattles take over the task.

According to the 'Wattle' disc *A.subulata* occurs in NSW on the tablelands and western slopes of the Great Divide from Lithgow to Warialda and west to near Pillaga. It grows in sand or sandy loam, often near creeks. At Booie it has survived severe drought and frost in shallow soil on a ridge.

According to the ASG archives this species is another very adaptable one. It grows well from Tasmania to Queensland in a variety of soils from calcareous sand to dolerite clay and heavy shallow topsoil over clay. Good drainage is mentioned in many cases.

Plate 6 *A.pycnostachya*

The following is from an article by Warren and Gloria Sheather which appeared in ASG Newsletter No 82

Acacia pycnostachya is a rare wattle from the Bolivia Range area, north of Glen Innis in the Northern Tablelands of NSW. It is a magnificent wattle. Our specimen is about seven years old and is now about 4m tall by 3m wide. The large sickle-shaped phyllodes are grey-green in colour. In spring the plant is covered with dark yellow, dense rod-shaped flowers in heads. Both foliage and flowers are attractive features. Acacia pycnostachya could be cultivated as a stand alone, eye catching specimen plant.

Warren and Gloria have donated seed of *A.pycnostachya* to the ASG Seed Bank and I have a number of seedlings from this seed in the ground at Booie. Even at one metre high they are impressive and attract comment with their pinkish new foliage contrasting with the grey-green older phyllodes.

Plate 7 *A.dawsonii*

The following is from an article by Warren and Gloria Sheather which appeared in ASG Newsletter No 81

A.dawsonii is a native of the Northern Tablelands of NSW, northeastern Victoria and possibly southern Queensland. *Acacia dawsonii* is a small shrub with upright branches, long narrow phyllodes and golden flowers. Each inflorescence has 4 to 8 individual flowers. We have been observing a population east of Armidale for at least 20 years. In that time this wattle has advanced west towards Armidale. The population has increased at least four fold. In spring the roadside glows with the flowers of metre high *Acacia dawsonii*. Propagate from seed.

There are no records of the cultivation of this species in the ASG's archives

Plate 8 *A.diphylla*

The following is from an article by Warren and Gloria Sheather which appeared in ASG Newsletter No 82

Acacia diphylla in some quarters is considered to be a subspecies of *Acacia blakei*. Regardless of its botanical identity, this tall wattle has great horticultural potential. *Acacia diphylla* inhabits the gorge country east of Armidale. There are also scattered populations near Gloucester on the North Coast of NSW. *Acacia diphylla* will grow into a tall shrub or small tree. Our specimens are about 11 years old and are about 7m tall. *Acacia diphylla* has both juvenile and adult phyllodes. Juvenile are elliptic in shape, light green in colour and soft to touch. Mature phyllodes are sickle shaped, grey-green in colour and rather leathery to the touch. This is another wattle with rod shaped flower heads. The pale yellow flower put on a stunning show in late spring and early summer.

Warren and Gloria have donated seed of this acacia to the ASG Seed bank and it certainly sounds as though it is worth a trial. There are no records of its cultivation in the archives of the ASG.

