



ASSOCIATION OF SOCIETIES FOR GROWING
AUSTRALIAN PLANTS

ACACIA STUDY GROUP NEWSLETTER
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Dear Members

South east Qld has at last received very welcome rain. Some areas received very heavy falls indeed but the drought is far from over and forecasters are suggesting that the climate in this region is changing. As in parts of WA, our climate appears to be heading for a drier period. With the prospect of a continuing increase in population in the area, the need to conserve water is very much to the fore. Old habits diehard and brilliantly flowered, water hungry annuals are still in great demand in nurseries and green lawns are still considered the way to go. At some stage there must be a serious rethink of what is promoted for gardens. Even wet rainforest trees have been suffering in Brisbane and I know of people who have lost plants 5 to 6m tall in rainforest plots because it was assumed that the rainfall was adequate for their needs. If the future is as predicted, it will become uneconomical to keep such plants alive as the cost of water rises.

My ceaseless promotion of acacias now stresses even more the drought hardiness of many species and I do have a few more listeners.

After a bumper harvest last year I have not been able to collect any seed from the acacias at Booie this year. Apart from the 'dry' the starving wildlife has been taking its toll. Where flowers did manage to open, the branches were broken down so the flowers could be eaten and any seed that did form was also eaten. If you have had a good year please think about the seed bank and how fresh seed is always welcome.

To those of you who enjoy the insects featured in the newsletter my apologies for their absence recently. Again the 'dry' severely affected insect numbers and my breeding cages have been empty for months. Numbers of insects coming to the lights at night are increasing now with the most unwelcome increase being in the numbers of processionary caterpillar moths. Egg masses from these moths are now appearing and I've poured metho on five egg clumps so far today. These egg masses were featured in an earlier newsletter. They look like a mass of white, thick webbing at the base of the plant's trunk and actually consist of eggs mixed scales from the body of the moth. I usually miss them but am reminded when a favourite plant is suddenly defoliated by a mass of large, hairy, voracious caterpillars.

The insects which have continued to make an impact during the 'dry' are the various mealy bugs. Often the only obvious sign of infestation is the presence of ants with the distortion of new growth hiding the bugs and their white coating. I have resorted to

cutting off this distorted growth in an attempt to eradicate them from some plants. Larger species are more easily seen and can be scraped off.

From members letters and emails

Alan Gibb, Vic - Sept

I have probably tried to grow about 200 plus Acacia species in my one acre garden. A count up yesterday yielded 40 growing at the moment and of course many are flowering.

Acacia olsenii starts the flowering season and *Acacia implexa* is probably the last to bloom.

One of the last species planted *Acacia blayana* is nicely flowering this season. It is two years old and 5m tall.

The soil here is clay loam and the average annual rainfall 675mm.

Leon Steinhardt, SE Qld sent these photos of *Acacia peuce* which he grew at Laidley in SE Qld. It was recently dug up and moved into a pot. *A. peuce* is a slow growing, long lived species which is only known from a few localities on the margins of the Simpson Desert.



The *A. peuce* was planted out about 15 years before I dug it up. It stayed at about 20 cm high for many years then gradually grew until it reached its present height. It only grew in spurts following heavy summer rain otherwise it just sat there. It has been in its pot for about two years and now regularly put on small bit of new growth. When I was digging it up I cut through its big main root which was quite thick, 2-4cm. All the soil fell off so it was virtually bare-rooted. I just put it into the large pot with sandy soil, saturated it and left it.

Bruce Clark, Panmure, Vic

I had intended to comment on the *Acacia-Racosperma* issue in a similar vein to that in Newsletter No 67 (Nov 1992). It is welcome that this will probably not go ahead. If there is good reason to split genera I think it would be best done by creating sub-genera and thus retain the genus name without causing references to become out dated. It appears that some taxonomists want the kudos that they think goes with the change.

Acacia allergies were commented on by Dr.Keane, the first leader of ASG, in the December 1964 newsletter, I used some of it in 'Wattles are Golden'-selection 36 on page 10. My neighbour told me one of his daughters had a bad reaction to acacias when planting trees after the 1983 bushfires. It is the only case I have heard about.

Bonnie Addison-Smith, SE Qld asked a number of questions which may be of interest to some other members. Her queries and my replies follow. I am no expert on these topics so both Bonnie and I would appreciate any comments.

Is there an optimum time to collect seed?

The optimum time to collect seed is when the pods are just beginning to dry out and split. This means that in theory one should collect every day as the seed is ripening. I try to do this but in practice it is of course easier to collect pods in one hit in a range of ripening stages. If the seeds are still green they should be very plump and larger than seed that has dried and hardened. If the seeds are too green when collected they will eventually harden but appear thin or shriveled and won't germinate.

When a number of different species are grown together, perhaps only one of each species, are the seeds true?

Acacias do appear to hybridize readily. *A.macradenia* and *fimbriata* have hybridised extensively in Toohey Forest here in Brisbane where *A.macradenia* is introduced and *A.fimbriata* is native. Seeds of *A.uncifera*, also a 'foreigner' in the area, produce very few seedlings which look like the parents. *A. conferta* may be involved there. In the May 2004 (No 91) newsletter a photo of a possible hybrid from Warren Sheather's property 'Yallaroo' was featured. The seed was from a cultivated *A.covenyi* but appeared to have *A.vestita* as the other parent.

The 'Wattle' disc mentions possible hybrids under the species descriptions and there are many.

At a Symposium on 'Hybrid breeding and Genetics' held at Noosa in April 2000 it was pointed out that *Acacia* hybrids are easily mass produced. These hybrids have good wood properties and faster growth than the pure species and it is thought that they will be the acacias of the future in Asia.

It seems that the more closely related the acacias are the more likely they are to hybridise. Pedley, in his 'Acacias in Queensland' states that 'naturally occurring hybrids are rare in Qld' but no doubt we are going to find out a lot more about hybrids as species that are normally separated geographically are grown together.

I have been against the cultivation of hybrids in the past but in the last few years I have looked at the success of *Grevillea* hybrids with envy and wonder if we can't come up with some super acacia hybrids – long lived, insect resistant and of appealing shapes and sizes. That would give the popularity of acacias the huge boost it deserves.

Should seeds be placed in the fridge immediately after collection? I leave my collection in paper bags until the pods have shed the seeds (hopefully) but sometimes the insects have enjoyed the delay. Freezing will probably destroy insect larvae but will it also affect the seed.

Storing seed is a problem I am tackling at the moment with the seed bank. As you may have read in the last newsletter I have recently acquired fridges. Refrigeration, Naphthlene and airtight containers seem to be the way to go.

There are two separate problems. I believe that most of the larvae that emerge soon after seed is collected are from eggs laid in the green seed and it is too late to do anything about the damage they cause. They are probably mainly beetle larvae and they mature with the seed. I have been unable to hatch any adults largely because I run out of patience. As the food supply is intermittent the larvae emerge, pupate in leaf litter etc and then remain dormant until the season is right for a good supply of food again. As you can imagine this may be a long period. Once the larvae have emerged and been removed from the seed you have collected there should be no further damage as there will be no adults or green seed.

The second nuisance and the more difficult one to deal with, is the problem of insects which attack stored grain when it is not stored in insect proof containers. I have never had a problem with beetles eg weevils, which can be a nuisance, however, moths can be devastating. Any sign of webbing with the seed suggests moths. The museum was unable to tell me if any are specific to acacias. It is a possibility as acacia seed can remain on the ground for long periods but I doubt if that type of moth would find its way indoors. The culprits are probably the common 'pantry moths'. These lay their eggs near seed and the larvae are able to chew through paper, plastic film etc as well as, in some cases, the hard testa of the seed. I have not managed to recover any intact adults so far but the bits and pieces suggest a cosmopolitan species which can attack whole grain (most require the grain to be damaged) is giving me most trouble.

The double insurance of refrigeration in insect proof containers seems the best way to go. Naphthalene, I am told is effective if you remember to renew it. Where seed is already infested I add a good dose of naphthalene before refrigeration.

Freezing may be OK for some species from cold climates but not for all.

Will the seeds from a form of a species (eg weeping, prostrate etc) give the same form, revert to the main form or is it a lottery?

It really is a lottery. It all depends on how that particular form is inherited and how common it is in the general population. Where a particular form is the norm in a habitat it can be expected to come true from seed. Where the form is an isolated 'sport' a percentage of the seedlings will often be true to that form. I did try a batch of *A.baileyana* seed from a prostrate form and about 30% were prostrate. This is why most 'forms' are propagated by cutting.

Does anyone have any comments or experience in this area.

From Warren and Gloria Sheather, 'Yallaroo' NSW

Oxley Wild Rivers National Park is situated east of Armidale on the Northern Tablelands of New South Wales. The Park protects an extensive gorge system and is home to many rare and interesting native plants including *Acacia ingramii*.

Acacia ingramii (coloured plate No1)

Acacia ingramii is a tall shrub or small tree that may reach a height of seven metres. The narrow, linear phyllodes are flat, with a small hooked tip. In spring the plants are covered with golden yellow, globular flowers.

In the Oxley Wild Rivers National Park, *Acacia ingramii* grows around and in the gorge system. In spring the gorges glow with the flowers of *Acacia ingramii*.

Acacia ingramii has adapted to life in local gardens. The species takes about three years to mature.

The species has limited distribution and is only found in the New England gorge system. This is one of New England's most attractive wattles.

Propagate from seed and probably cuttings.

Acacia ixiophylla (coloured plate No 2)

Acacia ixiophylla is a medium to tall shrub. The phyllodes are elliptical, about 30 mm long, and sticky to the touch. Bright yellow, globular flowers appear in spring and are carried on white peduncles.

In our garden, *Acacia ixiophylla* has proved to be drought resistant and frost tolerant. Our specimens are used as components in dense shrubberies. Annual pruning keeps the plants bushy and flowering profusely.

Acacia ixiophylla occurs north from the Blue Mountains in New South Wales into Queensland. The species was thought to occur in Western Australia. *Acacia verricula* has now being identified as this western species.

As per usual propagation is from seed and cuttings.

Acacia lineata (coloured plate No3)

Acacia lineata is one of our favourite wattles. The species is known as the Streaked Wattle and probably refers to the streaked appearance of the phyllodes.

Acacia lineata is a bushy, spreading shrub usually about one metre tall. The spreading branches often exceed one metre in length. The phyllodes are linear and about one centimetre in length.

In spring the plants become covered with globular, golden flowers. This is one of the brightest wattles in our garden.

Acacia lineata is said to be similar to *Acacia flexifolia* but our specimens, of both species, are completely different.

The Streaked Wattle could be grown on an embankment or as a colourful foreground plant in a shrubbery.

Acacia lineata has a scattered distribution. It is found in areas of South Australia, Victoria, New South Wales and Queensland.

Propagates readily from cuttings.

Acacia paradoxa (coloured plate No 4)

Acacia paradoxa is a very prickly wattle. Its common name is Kangaroo Thorn. Our specimens are pendulous shrubs about two metres tall. Small phyllodes are crowded along the branches. At the base of each phyllode are two spiny stipules. These give the species its prickly feel and appearance.

The bright yellow, globular spring flowers are carried in the phyllode axils. *Acacia paradoxa* is a very attractive plant when in flower. It is probably too prickly for the smaller garden but would be at home in rural gardens. Clumps of *Acacia paradoxa* are grown to provide nesting sites for small native birds.

Kangaroo Thorn is native to South Australia, Victoria, New South Wales and Queensland. The species is naturalized in Tasmania and probably Western Australia. It is a declared noxious weed in parts of Victoria.

We first saw *Acacia paradoxa* some years ago in the Warrumbungle National Park where it was apart of the spring explosion of wattle flowers.

The species was previously known as *Acacia armata*.

Propagate from seed. Preparation of cuttings would prove to be a very painful exercise.

Can anyone help?

From Sonya Ku

We (Dr Stephen Bonser UNSW and I) are starting a project looking at functional responses to fire and community assemblage, and I was wondering could you tell me whether the following species are obligate resprouter species or obligate reseeder species after fire?

We require sister species for our experiment, so if you know sprouter/seeder details of any (or even one!) of the following pairs that would be invaluable advice.

Acacia guinetii/aphylla, *chrysocephala/drummondii*, *lycopodiifolia/adoxa*,
fulva/leptoclada/spectabilis, *elata/mitchellii*, *paradoxa/cognata*,
verticillata/genistifolia, *acuminata/denticulosa*

From Bruce Maslin

World Wide Wattle website: assistance needed

The World Wide Wattle website aims to deliver a range of authoritative information concerning Acacias in order to inform, educate and promote the conservation, utilisation and enjoyment of this important group of plants. The information is intended for use by a wide range of people, both professional and amateur, including taxonomists, ecologists, foresters, etc. to school children and others who simply want to learn more about this fascinating genus. The primary focus of World Wide Wattle is on species that occur in Australia.

I manage the World Wide Wattle site which means that I am responsible for assembling and posting new information, and for maintaining the currency of information that has already been posted. As the site has grown over the past year it has become increasingly difficult for me to find time to do these tasks. I am therefore seeking assistance from anyone who may have an interest in helping out, primarily on a volunteer basis. The sorts of things that most need doing include the scanning of published literature and slides and preparing these for presentation on the site, and searching the world wide web for relevant information on *Acacia* so that it can be linked to. The skills required to do this sort of work would include typing (of course) and at least a basic knowledge of computers and preferably also the web. These tasks are not very demanding, however, they are very time-consuming. Because I work out of Kensington in Western Australia, it would be necessary, for logistical reasons, that

any helper live in the Perth metropolitan area.

My contact details are given below.

The World Wide Wattle website may be visited at: <http://www.worldwidewattle.com>

Thanks.

Bruce Maslin

Senior Principal Research Scientist

Department of Conservation and Land Management

Locked Bag 104, Bentley Delivery Centre, Western Australia 6983

Email: brucem@calm.wa.gov.au

Tel: 08-93340510(direct),0429 334051 (mobile),08-93340299 (Science Division office)

Fax: 08-93340327

Response to Pedley's paper titled 'Another view of Racosperma' published in Acacia Study Group Newsletter 90: 3-5 (2004)

Bruce Maslin¹ and Tony Orchard²

¹Department of Conservation and Land Management, Locked Bag 104, Bentley Delivery Centre, Western Australia 6983 (brucem@calm.wa.gov.au)

²Centre for Plant Biodiversity Research, CSIRO Plant Industry, GPO Box 1600, Canberra, A.C.T. 2601 (Tony.Orchard@deh.gov.au)

As reported in Maslin & Orchard (2004) the Committee for Spermatophyta has now voted to recommend accepting the Orchard and Maslin (2003) proposal to retypify *Acacia* with a new Australian type (Brummitt 2004). In view of the report having been published it is probably not technically necessary that we respond to Pedley's (2004) article, but it contains a number of statements that should be clarified. In the interest of brevity we will address these issues in the order that they appear in the paper, under headings (in italics) that are quotes from the article.

"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 applications of botanical names" [i.e. the International Code of Botanical Nomenclature] and *"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."*

These statements probably go to the heart of what is driving most of the opposition to the Orchard & Maslin proposal. What is embodied here is the notion that by proposing to retypify *Acacia* we are doing something 'wrong' by tampering with the type species of the genus. However, this view is incorrect and reflects a lack of understanding of the *Code*. To some nomenclaturalists the type is regarded as 'sacrosanct' and should not be changed, whatever the circumstances might be, and this was the case until a decade or so ago. However, at the last two International Botanical Congresses botanists debated at length (and modified the rules substantially), to address the legitimate concerns of users that plant names were often changed on account of purely technical requirements of the Code, rather than advances in knowledge. These changes embodied major strengthening of the Conservation and Rejection Articles, designed to reduce to a minimum disadvantageous changes of names, and the maintenance, to the maximum degree possible, of existing nomenclature.

In the case of *Acacia* the rule that applies is Article 14 (particularly Article 14.9) of the Code. Article 14 allows that "In order to avoid disadvantageous nomenclatural changes entailed by the strict application of the rules, ... this Code provides, in App. II and III, lists of names of families, genera and species that are conserved..." Article 14.9 states, in part, "A name may be conserved with a different type from that designated by the author or determined by application of the Code..." Other Articles specify the procedure to be followed (publication of the arguments for and against any change, and independent adjudication by several panels of international experts).

The Orchard & Maslin proposal was thus a perfectly legitimate action under the provisions of the Code. It was not a novel event – there have been numerous other proposals in the last decade that have utilised the provisions of this Article, and it is strange that Pedley was apparently unaware of these. The question isn't whether or not it was possible to conserve the name *Acacia* with a new type, but whether it was disadvantageous not to do so. Orchard & Maslin (2003) argued that nomenclatural stability would be best served by retypifying *Acacia* with a new type selected from the largest group of the genus, namely, subgenus *Phyllodineae*. The merits of our arguments were assessed by an independent, international panel of nomenclatural experts, the Committee for Spermatophyta, set up to consider just such cases, and a majority of them agreed with the proposal.

"..... countries that can ill afford to do so will have to change the names of about half their acacias quite unnecessarily."

It is ironic that Pedley should use an economic argument to oppose the Orchard & Maslin proposal. Adoption of his own 1986 classification would have necessitated around 200 *Acacia* species (more than will be affected by our proposal) having to change to *Senegalia*. A large percentage of these species occur in "countries that can ill afford" such changes, but this did not stop Pedley from advocating adoption of his classification (which, incidentally, was deemed unacceptable by the botanical community at the time – see below).

Notwithstanding the above we are certainly not unaware of, or insensitive to, the financial and other burdens that impact upon people as a result of name changes. Such costs are directly proportional to the numbers of name changes involved and, in the case of herbaria at least, the numbers of specimens involved. There are, however, many other potential costs that are often overlooked, for example: (1) changing databases and other electronic media such as web pages (these costs impact most significantly on those who are fortunate enough to have access to such technology); (2) rewriting and reprinting forestry, horticultural, agricultural etc. manuals, brochures and handbooks (and of course the taxonomic literature, such as regional and national floras); (3) changing legislation (that might relate to rare or weedy species); (4) the horticultural industry and botanic gardens (signage changes etc.). The larger the group the more significant are the likely impacts of name changes. The whole point of the Orchard & Maslin proposal was to minimize such impacts in the event of *Acacia* being split.

It is easy to make general, sweeping criticisms without substantiating what costs are actually involved. We could equally argue that there is a disproportionately high financial cost to developed countries like Australia if the Orchard & Maslin proposal is not adopted: after all, we have about 10 times as many taxa as occur in (for example) Africa; we would have to change not only around 250 000 (rough estimate)

herbarium specimens but also change numerous database systems (e.g. The Virtual Australian Herbarium) and web-based information systems (e.g. WorldWideWattle plus the numerous links to other web pages from this). In our case the problem would be compounded because Pedley treated the gender of *Racosperma* as neuter instead of feminine: this means that we could not effect simple global electronic changes from "Acacia" to "Racosperma". Instead, for around 700 species we would have to change the species and infraspecies terminations also (usually from -a to -um): this means that each species/infraspecies would have to be considered individually, thus adding very substantially to the cost of implementing a change from *Acacia* to *Racosperma*. This would need to be done in a context (Australia) of high labour costs, and rapidly shrinking resources for herbarium maintenance. This is not a straight-forward issue: there are many complicating factors involved. It is for this reason the Spermatophyta Committee places such weight on the actual numbers of name changes involved when making their decision.

"If the evidence for the proposed split had been objectively examined at the time, Racosperma could now be well-established in the botanical literature" [especially the *Flora of Australia* volumes]

Pedley's 1986 proposed split of *Acacia* into three genera had very significant implications worldwide because acceptance of this classification would have meant that almost 1000 Australian species and 200 extra-Australian species would need to change their name. Such a scale of nomenclatural disruption is not a trivial matter, and therefore the evidence required to justify the classification needed to be robust and defensible. Contrary to the above comments (in italics) Pedley's 1986 evidence was objectively assessed, not only by Maslin (1988) but also by a number of the world's leading Mimosoid legume specialists who met in Berlin in 1987 (see Maslin 1987 for a report of this meeting). As a result of these deliberations it was concluded that, for a number of reasons (none of which we consider 'dodgy', as claimed by Pedley 2004: 4), Pedley's 1986 classification should not be adopted. The most important of these reasons were that the evidence presented for recognizing three genera was inconclusive and/or incomplete and would not stand the test of scientific scrutiny; and, there was a recognized need for broad-based comparative studies of *Acacia* that encompassed other genera from tribes *Ingeae* and *Mimoseae*. (Neither of these reasons was cited in Pedley's 2004 paper.) Indeed, it was in recognition of the need for new data that prompted Maslin & Stirton (1997) to prepare a list of 'critical species' to assist researchers in undertaking these much-needed new studies.

The issue of the *Flora of Australia* volumes (Orchard & Wilson 2001a & b) having been published under *Acacia* and not *Racosperma* is often raised by those who disagree with the Orchard & Maslin proposal. Embodied in some of the remarks we have seen is the notion that some sort of deliberate attempt was made to ensure that *Acacia* would be retained for Australia at the expense of the rest of the world by publishing the genus under *Acacia* in the *Flora*. This certainly was not the case and the criticism is misguided. The Australian Biological Resources Study (ABRS), the body responsible for publishing the *Flora*, and its Editorial Advisory Committee, carefully considered the then prevailing arguments before deciding to publish *Flora* volumes 11A and 11B under the name *Acacia*. This action, as for all similar decisions for *Flora of Australia*, was designed to reflect the consensus view of botanists around the country. It should be noted that *Flora of Australia* was not alone in adopting this cautious view. All Australian State Floras and Census lists published

since 1986 treat this genus as *Acacia*. It is also worth noting that overseas botanists also declined to adopt Pedley's suggested segregate genera – the name *Senegalia* was not taken up in Africa, America or Asia, despite being available.

“The lovely flat-topped trees of the African veldt will be acacia no more, but Vachellia.”

This emotive argument is a little misleading. Contrary to popular belief there are probably only a few African acacias that are genetically flat-topped, the most important ones being *A. sieberana*, *A. abyssinica*, *A. tortilis* and *A. nilotica*. These four species belong to subgenus *Acacia* (which under our proposal would become *Vachellia*). However, only the first two of these species occur on the African ‘veldt’. The Wooded Grassland areas where these two species occur are not common (they are found in the Serengeti, parts of the Republic of South Africa, Zimbabwe, Kenya, Ethiopia and Tanzania). The picture of antelopes grazing among the flat-topped acacias is a popular image distributed to the world by the media, encyclopaedias, field guides, etc. They look picturesque, but if you were to visit Africa you would be hard pressed to find such scenes - they exist only in areas where elephants have modified the environment without interference from man. Therefore, Pedley’s ‘lovely flat-topped trees of the African veldt’ refers to very few species occurring in a restricted habitat. Incidentally, the largest part of sub-Saharan Africa, nearly 50% (2.7 million km sq), is covered by so called (often flat-topped) Miombo woodland which is dominated by two genera, *Brachystegia* and *Julbernardia*. Although some *Acacia* species occur in the Miombo, none of them is flat-topped. The above is based on information given in White (1983), Louw & Rebelo (1998), Millington *et al.* (1994) and Hurter & van Wyk (2001).

We could equally lament the loss of *Acacia aneura* (Mulga) which occupies vast areas of the Australian arid zone (Miller *et al.* 2002) if our acacias were changed to *Racosperma*. Not only that, Mulga would have to be called *Racosperma aneurum*!

While acacias are important to at least some people in Africa they have great symbolic significance within Australia. For example, Golden Wattle (*A. pycnantha*) is our official National Floral Emblem, a species of *Acacia* adorns the Australian Coat of Arms, green and gold (the predominant colours of Wattles) are our official National Colours, 1 September is officially declared Wattle Day, and the design of the Order of Australia medals (which recognize outstanding achievement and meritorious service of extraordinary Australians) is based on Wattle blossoms (see <http://www.worldwidewattle.com/infogallery/symbolic/> for details).

“Preserving the name Acacia exclusively for Australian species smacks somewhat of jingoism, inverse colonialism, of a sort.”

Such comments are inappropriate and serve no useful purpose and as such do not really warrant a response. However, because they are similar to remarks by Low (2002) who suggested that the efforts by “Maslin and his team” may be construed as Australian chauvinism (in arguing the case for retypifying *Acacia*) we feel it appropriate to refer the reader to the recently published Report from the Secretary of the Spermatophyta Committee:

“There has been some suggestion to the committee that the Australian proposers [Orchard & Maslin] are being excessively chauvinistic in proposing that they should

retain the name for their species. Equally it might be argued that their African opponents are being very much more chauvinistic in wanting to keep the name for a very much smaller number of species in their continent, and for only half their species at best. Again, there are two ways of seeing this.” (Brummitt 2004).

“... *the monetary cost of a change to *Racosperma* has been greatly exaggerated.*”

Pedley considered Woodford’s (2002) estimate of \$500 000 for changing 40 000 herbarium specimens as being “an impressive but extravagantly high figure”. We agree that this is a large amount of money, but disagree that the figure is inflated. For example, take the Western Australian Herbarium, which has a collection of about 40 000 *Acacia* specimens. The Herbarium maintains two inter-related databases, WAHERB (a specimen database) and WACENSUS (a names database), and the information they contain is delivered to the public via FloraBase. To maintain the integrity of these major database systems the Herbarium employs strict protocols for modifying the information they contain. Thus, to effect a change from *Acacia* to *Racosperma* each specimen would require a new determinavit slip showing its changed name and then its WAHERB record would need to be retrieved and also changed. To achieve this 40 000 specimens would need to be transported within the herbarium building – a very time-consuming and logistically challenging task. Then, before the specimens could be re-incorporated, new named folders would need to be created. Additionally the names would need changing on specimens in ancillary collections such as the carpological, wet and type collections. To modify WACENSUS two forms would need to be filled out for each taxon (there are around 1000 taxa involved) and the records then retrieved from the database and changed. Names on photographs would need to be similarly altered and these changes reflected in the large Image database that the Herbarium maintains. Then there are names in databases that are not dynamically linked to WACENSUS - these names would have to be located then changed, one name at a time. The WATTLE CD and the WorldWideWattle website (in part) are examples of these. The amount of time it would take to change the names in these systems (and modify the hyperlinks between the names) would be very considerable.

Considering the amount of time (thus resource) needed to effect the above changes at the Herbarium we think that around \$12 per specimen is a reasonable estimate for replacing *Acacia* with *Racosperma* at that institution (thus a total cost of around \$500 000). Finally, it is noted that because Pedley treated *Racosperma* as neuter it means that species and infraspecies terminations for at least $\frac{3}{4}$ of the taxa will need to be changed, along with their genus name. This substantially increases the cost of modifying database entries because it reduces the ability to effect global edits throughout the system.

And this is for just one herbarium, holding perhaps 15% of Australia's *Acacia* collections. To this add the cost of the legislative, handbook, botanic garden and nursery trade name updates discussed above.

“*No one should be overly concerned about the change in gender.*”

We disagree with this statement for a number of reasons. Treating *Racosperma* as neuter not only adds to the cost of effecting name changes in herbaria (see above), botanic gardens and elsewhere, but is also likely to compound the problems people

would have in using the new names. Take *Acacia pycnantha* for example. Under *Racosperma* the correct name for this species would be *Racosperma pycnanthum*, and herein lies the potential for great confusion. Many people (non-classically aware) will interpret *Racosperma* as feminine and will therefore try to match the species termination accordingly. Thus *Racosperma pycnanthum* will often inevitably be "corrected" to *Racosperma pycnantha*. This error will be repeated across nearly 1000 new combinations, both at the species and infraspecific levels.

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New Members

Welcome to new members: John Mahoney of Mt Duneed
and Isobel Guldborg

Coloured Plates

Plates 1 to 4 from Warren Sheather

See the article by Warren Sheather in this newsletter.

Plate 1 *A. ingramii*

Plate 2 *A. ixiophylla*

Plate 3 *A. lineata*

Plate 4 *A. paradoxa*

Plates 5 & 6 *A. cheelii* from Anthony O'Halloran's photos of acacias of the Pilliga

According to the 'Wattle' disc this species may grow to 10m. It occurs on the north-western plains and slopes of the Great Divide in NSW in eucalypt woodland especially on rocky or stony hillsides in skeletal or sandy soils.

Plates 7, 8 and 9 from Jeff Irons in the UK

Plate 7 *A. nanodealbata* Close up. A photo of the habit of this plant appeared in the last newsletter. It is growing in Jeff's garden.

Plate 8 *A. pataczekii* Habit photo

Plate 9 *A. pataczeki* Close up

This plant is growing at Kew Gardens, England. According to the 'Wattle' disc it is a tree or shrub up to 6m high and freely suckering. It occurs in north-eastern Tasmania in highland areas (at about 1400m) as an understory in eucalypt forest.

Thais Eisen
86 Taunton St
Annerley
Brisbane 4103

email 4thais@optushome.com.au

