AUSTRALASIAN PLANT SOCIETY
NEWSLETTER

# PENTACHONDRA

ISSUE 56 MAY 2016



**Lomatia fraseri**

# AUSTRALASIAN PLANT SOCIETY

**Promoting the cultivation and conservation of Australasian plants, and their closest relatives, in northern hemisphere gardens**

## Newsletter Number 56

## May 2016

### CONTENTS


| | |
|---|---|
| APS News | 1 |
| News from Sheffield, Peter Kohn | 6 |
| The University of Dundee Botanic Garden, Clare Reaney | 11 |
| Hot and dry in Tarragona, Phemie Rose | 12 |
| Hebes: New Zealand's best export, Stephen Harding | 13 |
| Success with flannel flowers, Maria Hitchcock | 14 |
| My way with tooted cuttings, Gary Firth | 16 |
| Growing correas, Judy Clark | 17 |
| Athrotaxis: A Tasmanian endemic genus, Gary Dunlop | 24 |
| My special plants, Morwen Tregudda | 26 |
| The genus Lomatia, Gary Dunlop | 27 |
| Australian plants online, Judy Clark | 36 |
| Minutes of the 2015 Annual General Meeting | 37 |



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# APS NEWS

## Welcome!

The APS would like to extend a warm welcome to new members Wayne Atkinson, Sally Brigden, Jacqueline Doherty, Gill Groombridge, Stephen Harding, Kathy King, Hans Jorgen Kuus, Monique Manley, Jan Michalak, Daniel Schneider, Pieter de Vreugd, Tim Waters and Michael Whittam.

## Meetings and events

### APS members' gardens open in West Sussex on Saturday 14th May

Two members' gardens in Sussex will be exclusively open for APS members on Saturday 14th May.

**Arrival from 10.30am: Gary and Maria Firth will be opening their garden at 9 Harlands Close, Haywards Heath, RH16 1PS.**

This is a densely planted suburban garden containing four greenhouses, two of which are home to a wide collection of tropical orchids including the Plant Heritage National Collection of Gongora orchids, which originate from South and Central America.

Outdoors is the National Collection of Myrtaceae (myrtles) together with other plants from Australasia and South America. In addition there are several ponds as well as plantings of dwarf rhododendrons, numerous bulbous plants plus a collection of hardy orchids grown from seed.

We are at the end of the close, on the left hand side. Parking in the close is limited. The garden is on a slope with many steps so unfortunately there is limited disabled access.

**Arrival from 1.30:Tim and Gillian Burr welcome you to their garden at Field House, Brockhurst Farm, Watersfield, RH20 1NX.**

Most of the Australasian plants are in our greenhouse with a handful round the garden. We are specialising in plants requiring a Mediterranean climate (see list on page 2). Hopefully quite a few plants will be in flower although some plants will have finished by May.

As novices, we are looking forward to discussing with other members what their experiences have been with the plants that we have - for example, could they be grown outside? - because we don't want to use precious space inside if they would be happy outside. We have started to try some spare plants in the garden with rather mixed results. We know from Pentachondra that most members grow their plants outside with perhaps winter shelter for the tender ones, but any experience with glasshouse culture would be very welcome. We had a 'honeymoon period' the first year but the pests have now found the plants: how do others deal with them? Watering regimes is another aspect we are keen to learn about.

Brockhurst Farm is immediately off the A29 at the lowest point in Watersfield. The house has a purple front door and is on the left-hand side of the road where the paving blocks begin on the road surface. Parking is limited; there will be some space in front of the garages and there is some on the left-hand side of the road before you reach our house. A lay-by round the corner on the A29 is suitable for 'overflow' parking.

The garden is sloping down to a stream (crossed by two bridges) and then

**Australian Plant List**

Field House April 2016

In glasshouse beds (2 x 12 $m^2$) except where otherwise specified,

*Acacia acinacea*
*Allogyne hakeifolia* (purple phase)
*Allogyne hakeifolia* (white phase)
*Anigozanthus flavidus* (red phase)
*Anigozanthus flavidus* (yellow phase)
*Astartea fascicularis*
*Banksia burdettii*
*Beaufortia sparsa*
*Billardiera longiflora*
*Boronia crenulata*
*Brachyscome iberidifolia*
*Callistemon subulatus* (garden)
*Calothamnus quadrifidus*
*Correa glabra* var. *turnbulii* (syn. *C. schlechtendalii*)
*Correa* 'Mannii' (pot)
*Derwentia perfoliata*
*Diplarrena moraea* (pot)
*Eremaea violacea* (seedling)
*Eremophila maculata*
*Eucalyptus gunnii* (garden)
*Gompholobium scabrum* (pot)
*Grevillea rosmarinifolia* (garden)
*Hakea cucullata* (seedling)
*Hakea florida*
*Hardenbergia comptoniana*
*Hovea elliptica* (pot)
*Kennedia coccinea*
*Leucophyta brownii*
*Leptospermum polygalifolium*
*Melaleuca decussata*
*Melaleuca lateritia*
*Melaleuca pulchella*
*Orthrosanthus multiflorus* (pot)
*Ozothamnus rosmarinifolia* (pot)
*Patersonia occidentalis* (pot)
*Pimelea ferruginea*
*Prostanthera baxteri*
*Rhodanthe chlorocephela* (pot)
*Rhumohra adiantiformis* (garden)
*Stylidium graminifolium* (pot)
*Templetonia retusa*
*Thryptomene saxicola*
*Verticordia plumosa* (pot)
*Westringia brevifolia*
*Xerochrysum bracteatum* (pot)

away from it up to the greenhouse. The garden is reached by a ramp (hopefully, if it is finished in time), otherwise by a flight of seven steps.

The two gardens are approximately 25 miles (45 minutes) apart and both will be offering refreshments. The café at Borde Hill gardens is also close by if you wish to have lunch.

Gary and Maria are, respectively, chairman and secretary of the Plant Heritage Sussex Group. They will have some plants for sale in aid of Plant Heritage.

At the 2015 AGM it was agreed members could bring plants to sell at meetings, with at least 20% of the proceeds going to the APS. This does not, of course, preclude members bringing plants to give away.

## RHS Plant Society Show, Wisley, Saturday 18th and Sunday 19th June

The APS will have a stand for the first time at the annual RHS Plant Society Show, held at RHS Garden Wisley (Woking, Surrey, GU23 6QB). The show is described thus on the RHS website*****: "*A major Plant Society show featuring displays from many plant societies, large colour-filled central displays, information about showing and judging a range of plants, planting displays and master classes*." As well as the APS exhibitors include the Hebe Society, the Conifer Society, the Hardy Plant Society, the Alpine Garden Society and the British Pteridological Society.

The Plant Society Show show offers a great opportunity to meet APS members and learn more about growing Australasian plants. It is being co-ordinated by APS events organiser

Gary Firth; contact him at meetings@anzplantsoc.org.uk if you would like to help and have not already volunteered. The only qualification required is lots of enthusiasm for Australasian plants!

As a society exhibiting at the show we can offer APS members a reduced priced entry ticket to Wisley gardens on the two days of the show. If you are an RHS member obviously you won't pay, but if you are not entry will cost £8.40 rather than the usual £14.50. If you would like to take advantage of this offer please contact Judy at editor@anzplantsoc.org.uk at least two weeks beforehand so that your name can be passed to reception at Wisley. You will need to produce identification on the day.

In the past the APS has exhibited at Chelsea and Tatton Garden but this will be the first time for many years that we have attended a show. We hope the experience will help us prepare for exhibiting at more shows, including the Hampton Court Palace Flower Show in 2017.

* www.rhs.org.uk/plants/plantsmanship/plant-society-events

## London meeting:Chelsea Physic Garden and Mona Abboud's garden,Sunday 21st August (provisional date)

The Chelsea Physic Garden was founded in 1673 by the Worshipful Society of Apothecaries for its apprentices to study the medicinal qualities of plants. The focus of the garden remains plants of medicinal and ethnobotanical interest. They also grow rare and endangered species and plants named or introduced by people associated with the Garden's history. Not to mention botanical order beds, collections of island endemic species, and a number of glasshouses for plants too tender to thrive outside. Medicinal plants on show include ones associated with aboriginal, maori and South African tribal medicine. We anticipate that a member of the garden team will show us round.

APS member Mona Abboud is the holder of a National Collection of corokia. Her long narrow garden in Highgate is chock full of interesting plants, including many from Australia and New Zealand; for a list of plants of interest go to monasgarden.co.uk.

Further details will be posted on the website and included in the next e-newsletter. If you do not use electronic communication please contact events co-ordinator Gary Firth (details inside back cover) and he will ensure that this information reaches you.

## AGM 2016

The 2016 Annual General Meeting will be held as usual in November at Lullingstone Castle, Eynsford, Kent. As for the London meeting further details will be made available electronically, or you can ask for information by post or phone.

## Meetings and events in 2017

Do you have any ideas for events or shows in 2017? Would you like to open your garden for APS members? Or is there a little-known garden in your neck of the woods that you think APS members would enjoy visiting? Perhaps you'd just like to see Australasian and other southern hemisphere plants in a well-known garden in the company of other plantaholics?

If so, APS meetings co-ordinators Gary and Maria Firth would love to

hear from you (meetings@anzplantsoc.org.uk). The Society is keen to get out of the south east and to hold events in parts of the UK that we rarely visit, for example, the south-west, East Anglia and Scotland.

### APS members at Hampton Court Flower Show

Gary and Maria Firth will be putting on a display of Australian myrtles at this year's RHS Hampton Court Palace Flower Show which runs from July 5th to 10th. They will be in the main Floral Marquee, as will Graham Blunt who always includes Australian plants in his display.

### Have you paid your subscription?

If you have not yet paid your 2016 subscription you will find a final reminder to do so enclosed with this newsletter. Please ignore this if you have paid between the editor receiving the membership list and the publication of this newsletter.

## From the Treasurer

### Annual accounts

A copy of the accounts is included with this edition of Pentachondra. I hope they are largely self-explanatory. The one item which does look anomalous compared with the previous year is the cost of printing Pentachondra, but this is simply due to the cheque to pay for the December 2014 edition not being cleared until January 2015. Since then, payments have been made online via BACS, and have cleared much more quickly – therefore, in 2015 three editions were paid for in total, rather than two as in 2014.

### Subscription increase – an important message

As the minutes of the meeting (page 37) record, it was agreed at our last AGM that membership subscriptions should be increased with effect from January 2017. It is more than 10 years since the UK subscription was increased and in that time postage and printing costs have risen considerably. It was also agreed at the AGM that if the Society is going to continue to grow, it would be prudent to try to increase our income somewhat to fund this. So the annual subscription for UK members will rise by £5 to £15, and that for overseas members by £3 to £18. (The overseas subscription was raised more recently, so the difference in subscriptions of £3 should be enough to cover the difference in the cost of posting Pentachondra to the UK and abroad.) The committee very much hopes that members will still consider the membership offers good value for money.

**Members who pay by cheque or Paypal need do nothing now**; you will receive a reminder to pay the appropriate amount when your membership is due for renewal. However members who pay by Standing Order will need to change the amount of the order. **I would therefore request that everyone who pays by Standing Order, and who uses internet banking, updates their order to reflect the new subscription rate before the end of the year, and notifies me by email** (membership@anzplantsoc.org.uk) that they have done so. Later in the year, I will send out reminders to everyone who has not told me they have changed their Standing Order, with a form to send or take to their bank. **If you prefer to use such a form, you need do nothing**

**now.** But obviously it will save on unnecessary postage costs if as many members as possible change their Standing Orders without needing the reminder letter – so please consider doing this in the next few weeks.

Jeremy Spon

## Seed list review

For many years now the society's seed list has not had a full stocktake and review. Many of the seeds we hold have been stored for a considerable period of time and some of the seed stocked is now in need of a change.

It is with this in mind that we have started a process that will, in the fullness of time, see a complete overhaul of our list. We have already done a complete review of the Proteaceae, Acacia, Asteraceae, Correa and a few other groups that we offer and this will start to show in the list as time goes on. **In order to complete the seed-list review process we need your help.** Have you found that something you had from the list hasn't germinated? Did something else germinate well? Have you got experience of a specific group of plants, ones that we offer seed of, that you can help review? One of the main reasons people join our society is because of our seed list so please help us make it the best seed list it can be.

As many members live in the UK and northern Europe we would also like to offer more reliably hardy species on our list. **Have you any suggestions for new, hardy, species we should offer?** If so, please email me at chairman@anzplantsoc.org.uk or Janet at seeds@anzplantsoc.org.uk, or write to Janet (address inside back cover).

**Do you collect seed from your own garden plants?** Why not offer seed to other members of the society through our seed list? We are offering **a free packet of seeds** from the list to everyone who donates seeds. What a great opportunity to grow something new!

**Have you ordered your seeds yet?**

Where else could you get hold of up to 20 packets of unusual and hard to find species for just £4? The APS seedlist of course! Why not order some seeds and have a go?

Of course the seed-list isn't just about offering you the opportunity to grow exciting and exotic plants. It's also an important step in making sure that some species from Australasia don't die out as garden plants. By trying new (to you) species from the list, sharing your experiences, and propagating from the resulting plants, **you can help to conserve species that could quite easily die out as cultivated plants.** If you have had a great success with a species from our seed list please consider writing something about your experiences for Pentachondra.

**Compliance with the Nagoya protocol**: Most of our seed is bought in from licensed seed companies in Australia and New Zealand and as such we are lucky that there is limited impact on our seed-list from the Nagoya protocol on access and benefit sharing (a piece of international legislation governing access to genetic resources). However, as part of our duty under this legislation we should stipulate that should any research and development be conducted on any seed acquired from our list it is the responsibility of the person doing the research and development to set up a

relevant agreement with the country of origin. Should you require more information on this please contact me at chairman@ anzplantsoc.org.uk.

Robbie Blackhall-Miles

***Kunzea muelleri***

Yellow flowered *Kunzea muelleri* grows in alpine and sub-alpine heaths in NSW, ACT and Victoria. It is reputedly both very hardy and very beautiful and was last listed in the RHS Plantfinder in 1998. Does anyone grow it? Or know where seeds might be obtained? If you can help please contact the editor.

## Plant Heritage membership

The APS became an organisational member of Plant Heritage (National Council for the Conservation of Plants and Gardens) in January this year. Benefits include publicity for the Society through Plant Heritage and the opportunity to have a stand in the Plant Heritage section of the floral marquee at the RHS Hampton Court Palace Flower Show. Moreover, APS members (up to 50) who aren't already Plant Heritage members will be able to become Plant Guardians under the aegis of the APS.

Plant Guardians undertake to cultivate, propagate and share a plant or plants which are considered rare in cultivation. Many APS members grow plants that are rare in cultivation; it comes with the territory. Doing so as a Plant Guardian means you get a 'red label' for your plant, and, more importantly, as Plant Heritage publishes a list it becomes public knowledge that someone is looking out for that plant. Australasians that have a Plant Guardian include *Callistemon* 'Happy Valley', *Melaleuca cuticularis* and *Xeronema callistemon.* Contact Robbie at chairman@ anzplantsoc. org.uk if you are interested in becoming a Plant Guardian through the APS.

## National Collections of Australasian plants

Plant Heritage National Plant Collection© holders undertake "*to document, develop and preserve a comprehensive collection of one group of plants in trust for the future"* **(**www.nccpg.com/National-Collections.aspx). There are about 32 collections of or including Australasian plants listed in the 2016 National Plant Collections Directory directory, nine of which are held by APS members. The table opposite provides brief details; to find out more search "Collections" on the Plant Heritage website, www.nccpg.com.

## Why not contribute?

Many thanks to all members who have provided articles for this issue. Members' contributions, in all their glorious variety, are what make Pentachondra special.

The deadline for the next issue is **15th October**. Any item, short or long or in-between, that has some connection with Australasian plants and their allies will be much appreciated. Maybe you can recommend a book, or a garden or nursery that you enjoyed visiting. Or perhaps you could tell us about your own garden, where it is, what the soil and climate are like, and your success or otherwise with Australasian plants. Please don't hesitate to contact Judy at editor@anzplantsoc.org.uk if you have any questions about contributing; she'll be delighted to hear from you.

## National Collections of Australasian plants

* = new for 2016; P= provisional; M = APS member

| Collection | Holder | Location |
|---|---|---|
| **Banksia* South East Australian species (P) | Mr Robert Blackhall-Miles (M) | Gwynnedd |
| *Clianthus* & *Sutherlandia* (P) | | Dunskey Gardens, Dumfries & Galloway |
| *Cordyline australis* (and 6 other *Cordyline* sp., | Mr W. Stanley Payn | Fauvic Nurseries Ltd., Jersey |
| **Corokia* | Mona Abboud (M) | London |
| **Correa* (P) | Dr Judy Clark (M) | East Sussex |
| *Cortaderia selloana* and *C. richardii* cultivars | Mr AJ Shipperley | Berkshire |
| *Dianella* (P)<br>*Libertia* (P)<br>*Phormium* (P) | Mr Neil Porteous | National Trust Mt Stewart Garden, County Down |
| *Eucalyptus*<br>*Podocarpus* & related Podocarpaceae | Dr & Mrs DJ Smith (M) | Hampshire |
| *Eucalyptus* species | Mr T Hart Dyke (M) | Lullingstone Castle, Kent |
| *Eucryphia* | Mrs K and Mr A Bunn | Devon |
| *Eucryphia* | | National Trust Bodnant Garden |
| *Eucryphia* | Lady Anthea Forde | Seaforde Gardens, County Down |
| *Eucryphia*<br>*Nothofagus* | Mr S Heffernan | Mount Usher Gardens, County Wicklow |
| *Eucryphia* species and primary hybrids hardy in southern England<br>*Nothofagus* species | Dr C Clennett | RBG Kew, Wakehurst Place, West Sussex |
| *Griselinia* species (P)<br>*Leptospermum* (P) | Richard Baines | Logan Botanic Garden,, Dumfries & Galloway |
| *Harold Comber Collection (Chilean & Tasmanian plants) | Mr S Herrington, | National Trust Nymans Garden, West Sussex |
| *Hebe* - The Douglas Hall Chalk Hebe Collection - | | Plumpton College, East Sussex |
| *Hebe* (dwarf) | N Hutchinson | Yorkshire |
| **Hebe stricta*, *traversii* and cultivars | Stephen Harding (M) | Kent |
| *Hoheria* | Mr S Griffith | Abbotsbury Sub-Tropical Gardens, Dorset |
| **Muehlenbeckia* | Jan Michalak (M) | Suffolk |
| Myrtaceae (Tribe *Myrtaea*) | Dr G & Dr M Firth (M) | West Sussex |
| *Nothofagus.* | Mr Mark Jeffery | The National Trust for Scotland, Crarae Garden, Argyll & Bute |
| *Olearia* | Mr Paul McDonnell | Dublin |
| *Olearia* | Mr K Ball | The National Trust for Scotland, Inverewe Gardens, Highlands |
| *Pittosporum* | Mr P Champion | Bicton College, Devon |

# NEWS FROM SHEFFIELD

Peter Kohn

I imagine many people will have had a similar winter to ours. Mild weather for early winter and some late frost just when certain plants had decided that winter was over and were putting on new growth. In Sheffield we missed the heavy rains that much of Yorkshire experienced so generally most plants had a good chance of survival. Not in the least Australian, but my two plants of *Meconopsis integrifolia* failed to die back for the winter and were hit by the late frost. One has recovered well; the other needs to be discarded when I have finally given up hope.

Seed sowing has proceeded on our usual pattern. Sowing starts on Boxing Day and by the time we were getting towards the end of the main sowing in mid-February germinations were coming thick and fast, but then came cooler weather and everything slowed down. Four *Orthrosanthus* species were sown on January 10th and *O. multiflorus* germinated well on March 21st but there are no signs of the other three yet. However, the two sorts I grew last year didn't germinate until mid April and we are well behind last year with other germinations so I am still hopeful.

We took a tour of the Sheffield Botanical Gardens this afternoon (April 8th) and found most of our Australasians had wintered well. In the Mediterranean bed the only losses were *Banksia blechnifolia* and our new plant of *Dryandra formosa* (syn. *Banksia formosa*). *Banksia blechnifolia* has no right to be outdoors in Sheffield clay so the fact that it just about survived the previous winter was a miracle and it isn't **quite** dead so we'll leave it for a few more weeks. The *Dryandra* looked unhealthy when we bought it last September but it does appear to have some green growth points so it too will stay in the ground a little longer.

The big surprise is our *Kunzea recurva* (photo opposite). We really weren't expecting it to be frost hardy but it has come through two winters and although it is still tiny it is putting out strong new growth. We saw a wonderful plant under this name in the magnificent greenhouse dome at the National Botanic Gardens of Wales but I can't believe it is the same plant. References on the net all talk about a shrub but that plant was a small tree. Does anyone have any more information?

Elsewhere, our new plant of *Grevillea victoriae* has flowered continuously since November with a final flower just going over. The leaves don't look as healthy as we would like and the flower colour was more orange than the plant we grew in north west Scotland but we are still hopeful that it will take off this year. The other *Grevillea* (unlabelled but probably 'Canberra Gem') is full of flower whereas our own plant at home is still in bud. The *Clianthus puniceus* which is growing on the south wall of the botanic garden entrance lodge was full of flower in January. It was growing so fast that it was covering the office window and was cut back but it is just as full of flower again in early April (photo opposite). A plant from the same batch of seedlings planted indoors in the pavilions is growing luxuriantly but is reluctant to flower.

The correas in the Mediterranean bed are all thriving. 'Marian's Marvel' is the showiest and most floriferous, still full of flowers after a great display all winter. *Correa alba* and *C. backhouseana* are both growing in the




**Sheffield Botanical Garden**

left:
***Kunzea recurva*:** does anyone have any more information?

below:
***Clianthus puniceus*** from New Zealand growing on the south wall of the entrance lodge.





left:
***Pittosporum patulum*** in the University of Dundee Botanic garden; it is endangered in its native New Zealand.

below:
***"Grevillea robusta"*** bought from a garden centre by Phemie Rose: can anyone identify it?



pavilions but again reluctant to flower there whereas the plants growing in the Mediterranean garden are flowering really well.

I won't go through all the plants in the pavilions, not least because many have lost their labels and I am not knowledgeable enough to recognise most of them. In general, cyatheas are thriving. Callistemons are not particularly happy apart from one red flowered giant (*C. citrinus*?) which has reached the roof and is flowering really well. An acacia labelled *A. verticillata* is in flower but not looking happy. It doesn't appear to be the same species which we grew very successfully outside at Kerrachar; the flowers are much smaller and it lacks the rather unpleasant smell. Various grevilleas are also planted in the pavilions. None looks as happy as those outside. The indoor *Prostanthera cuneata*, which was looking pathetic last summer, seems to have been removed whereas the plant in our own garden is the picture of health.

The overall conclusion seems to be that many Australasian shrubs are far happier outside than in a gently heated greenhouse, even in Sheffield. But then we haven't had a really testing winter for some time !



# THE UNIVERSITY OF DUNDEE BOTANIC GARDEN

Clare Reaney

When the University of Dundee Botanic Garden was begun in the 1970s there were plans to show the whole collection geographically, and the Australasian collection occupies about a fifth of the 10 hectare site. The south facing aspect, overlooking the Tay, makes it probably one of the milder parts of the east coast of Scotland. Rainfall is usually on the low side (700 mm annual average) and the site slopes gradually which allows for frost drainage. The garden area has been landscaped to maximize south facing slopes. Most of the Australian species benefit from a south facing bank while the New Zealand plants have a more woodland feel.

Currently there are approximately 20 species of *Eucalyptus*, 40 Australian species and 75 species of New Zealand origin. Originally about 25 *Eucalyptus* species were grown, mostly from Tasmania. After a hard winter many of these were killed to the ground but resprouted eventually into multi-stemmed specimens with great character.

In 2012 the Curator, Alasdair Hood, travelled to Australia to examine particularly how conservation nurseries manage their stocks for seed production. Companies such as Nindethana and Wild Seed Tasmania have been very helpful in sourcing seed from the more southerly, mountainous parts of Australia. The Mt Bogong Daisy, *Olearia frostii*, has done well as has *O. viscosa* from South Australia. Several *Melaleuca* species are reaching 1 m high.

While there are considerably more New Zealand plants available commercially and many of them have proven hardy over time we found it difficult to source wild provenance material direct from New Zealand. Every effort is made to comply with the latest legislation including the Nagoya Protocol. Dunedin Botanic Garden in South Island were able to

provide seed and other interesting species have been acquired from the established gardens in the west of Scotland .

Of the original plantings the Red Beech, *Nothofagus fusca*, is now a fine tree which produces seed. *Pittosporum patulum* (photo page 10) has also produced a good number of seedlings. New plantings of *Pseudopanax arboreus* have stood up well and *P. ferox* promises to make a multi-stemmed specimen.

The area is fairly low maintenance apart from containing the seeding habits of the New Zealand sedges. Unfortunately weeds often cluster around the *Aciphylla* specimens until a valiant volunteer is found. The bush lawyer, *Rubus cissoides* , might also prove to be a menace when it outgrows the *Olearia* shrub it is climbing over .

❀❀❀❀❀❀❀❀❀❀❀❀❀❀❀❀

# HOT AND DRY IN TARRAGONA

Phemie Rose

The summer of 2015 was the hottest and driest here for 40 years and both plants and people were baked by the sun. But most survived it.

I had brought two Australian restios (grown from seed in West Cork) here to Catalonia two years ago - *Balaskion tetraphyllum* and *Tremulina tremula* but unfortunately neither of them survived the summer of 2015. Of their South African cousins (also grown from seed in West Cork) 10 are still surviving despite the best efforts of 3 stray kittens who loved pouncing on each other through the springy culms. They also love pulling down the seed heads and then trying to catch them as they sprang up again. They are all still with us!

Acacias (*Acacia cultriformis* and *A. floribunda*) grown from APS seed are growing and flowering. However, the biggest and best acacia was already here when we moved in. I'm not exactly sure of it's name but it is probably *A. dealbata*. The flowers are forming at the moment. *Melaleuca lanceolata* (also APS seed) is coping very well with the hostile conditions and while the *Metrosideros (M. excelsa, M. robusta* and *M. bartlettii)* shed a lot of leaves they have survived. Surviving also are *Cordyline australis, C.* 'Torbay Dazzler' and *C. obtecta* 'Green Goddess'. *Hebe* 'Bowles Hybrid' is struggling but *Senna odorata* (APS seed from last year) is hanging on in there.

Grevilleas do well here although the "*Grevillea robusta*" I bought from a garden centre (photo page 10) has just produced red flowers! *Grevillea robusta* is used as a street tree here, with irrigation of course. *G.* 'Canberra gem' is very tough. Of the bottlebrushes, *Callistemon pallidus* is growing really well but *C.* 'Captain Cook' looks quite peaky. *Solanum laciniatum* is alive and produced lots of seeds but is not thriving. *Sollya heterophylla* seems to be quite at home in these conditions. *Pittosporum tobira* 'Nanum' (a Japanese pittosporum cultivar) grows really well (much to my surprise) and is available in many garden centres.

*Eucalyptus ficifolia* (from APS seed) is my favourite eucalyptus. I brought three small plants from Ireland. The biggest has grown well and looks very healthy. The smallest died and I thought the middle sized one had also died when most of the leaves turned

brown, but two days ago I noticed it had new leaves. Wonderful!.

The whole garden is an experiment in Mediterranean gardening, with plants having to survive without any additional watering. I am of course, also trying out plants from seed from other hot dry countries. Anyhow I enjoy experimenting.



# HEBES: NEW ZEALAND'S BEST EXPORT

Stephen Harding

I have always admired the genus *Hebe* as there cannot be any other group of plants on the planet that offers such a diversity of habit, texture and form. Whether it is a large leaved *H. speciosa* from the North Island of New Zealand or a small, hummock forming *H. buchananii* from the Southern Alps, there is something for everybody.

My father got me addicted to hebes when I was an apprentice nurseryman in the early 1980s. He had two or three plants in the garden which refused to grow from cuttings and he challenged me to grow some for him, which I did. This resulted in cuttings being taken each week of various cultivars growing around Southampton. We soon had so many that I offered them to my employer who bulked them up and was soon producing thousands of plants a year to sell within the nursery trade.

Whilst an apprentice, I came across the Hebe Society (formed in 1985) and in 1987 I plucked up the courage to join. It was interesting to find other people with the same passion. Many shows and AGMs later and I was made chairman last year: a very long trial period!

Of all the ones to grow, my favourite would be *Hebe elliptica* (photo page 19) which is either a spreading plant to 45 cm or an upright shrub to 1 m. This species is found in New Zealand, the Falkland Islands and the southern tip of Chile, and is tough as old boots. It has pale blue or white flowers and several forms have been named over the years. The Falkland Island form is only slightly different to the type form.

For a splash of colour all year round I like *H.* 'Purple Queen' and *H.* 'Amy' both of which have purple leaves and blue purple flowers. Both are upright in habit and prefer a sunny, sheltered site.

Quite a few *Hebe* are green leaved with pure white flowers. This is due to the lack of pollinating insects during daylight hours in NZ. In the wild most hebes are pollinated by birds or, after dark, moths. Probably the best of the white flowered plants is *H. stricta* 'Lindleyana', which has flowers up to 180 mm long. The racemes tend to twist or curl adding interest through the summer.

I prefer growing the older hybrids such as *H.* 'Veitchii' (syn. 'Royal Purple', 'Alicia Amhurst'), probably the best dark flowered of them all. *H. speciosa* has large oval leaves and dark red flowers with contrasting white anthers. As the weather turns colder the leaves turn purple. The *speciosa* types definitely need shelter from east winds and frost.

Of the thousands of modern hybrids on the market the one you cannot ignore is *H.* 'Heartbreaker'. This variegated plant forms a mounded bush to 60 cm wide and has become the biggest

selling *Hebe* of all time. For a variegated plant it is remarkably hardy and in winter the tips of the branches turn purple which contrasts well with the variegation throughout the plant.

I am currently raising my own plants from seed. Some have been deliberate crosses and others are naturally occurring seedlings. Hebes are promiscuous plants and seedlings appear in pots and borders all summer long. For every one natural cross there must be at least a hundred green leaved, white flowered seedlings. My allotment is slowly being overtaken by *Hebe* hedges as I am using this as my trials ground. My own crosses are yet to flower but several look promising in habit, leaf form and winter colour. Hardiness and disease resistance are important factors and a colleague in Scotland is breeding *H. speciosa* to withstand -15$^0$C. The holy grail of *Hebe* breeding is to find a spreading, ground covering plant which has purple foliage and is cold hardy. I will just have to keep trying!

In 1995 the Hebe Society established a reference collection of every *Hebe* and *Parahebe* known at that time. It was sited in Cornwall but after many years had fallen into neglect. In 2008 a working party went to Cornwall and salvaged cuttings of 84 hebes out of the 600 plus originally planted. Plants common in the nursery trade were not collected as we wanted to concentrate on the older, lesser known plants.

Five members grew cutting material and I not only grew my share but took over other members' rooted cuttings and grew them on. I soon had over 2000 potted plants in my garden taking up valuable space. Homes had to be found and in 2010 we approached two horticultural colleges who were then given plants to grow for educational purposes. One is in south Wales and the other is Plumpton College in East Sussex.

In 2012, Plumpton achieved Plant Heritage National Plant Collection status for their collection. It is called "The Douglas Chalk Hebe Collection" after the nurseryman and founding chairman of the Hebe Society. Douglas was a student and later became an advisor at Plumpton and it is a fitting tribute that his plants have returned "home". Other Hebe National Collections can be found at Hedgerow Dales in Yorkshire and in my own garden in Kent.

One very good collection can be found at the Lovell Quinta Arboretum in Cheshire. The Hebe Society will be visiting there in September as part of our 31st AGM weekend. We will also visit local gardens. Last year, for our 30$^{th}$ AGM, we visited Lowaters Nursery in Hampshire for what was a memorable event. Lowaters is home to the Garden Beauty range of plants and offer a huge variety of hebes. They have a very good mail order service

If any APS members would like to come along to Cheshire in September please contact me at hebeexpert@gmail.com or 07743 939490. You are all welcome.



## SUCCESS WITH FLANNEL FLOWERS

©Maria Hitchcock

Flannel flowers (*Actinotus helianthi*; photo page 20) are iconic Australian native plants yet few Australian gardeners are able to grow them successfully in their gardens. So far

some work has been done with commercial production but a gap remains with the home gardener. Many people have tried growing flannel flowers with little or no success and it is very difficult to source plants apart from a few specialist nurseries.

Seed germination has always been a difficulty due to the matted collection of hairs around the seed which stops water penetrating. I remember years ago a native plant enthusiast in Parramatta demonstrating how she treated the seed before sowing. She tried several burning techniques being careful to singe the hairs but not damage the seed itself. It was a hit and miss affair.

It is widely believed that seed more than two months old develops strong inhibitors. Commercial seed sold in packets does not have a collection date so it is probable that the seed is more than two years old and not viable any more.

Some breakthroughs in germination have take place in recent times. Margaret Guenzel, a member of the Victorian Australian Plants Society experimented for several years with flannel flower seed germination. She based her personal research on the theory that the hairs were preventing water from penetrating the seed. Using Wettasoil***** she embarked on a series of trials and hit upon a successful method. She uses three drops of Wettasoil in a cup of tepid water (in a jar with a lid) and soaks the seed in this for an hour, shaking vigorously from time to time. Lloyd Hedges of the Menai Wildflower Group did his own trials using smoke water which he makes himself. He has had a lot of success in germinating seed up to two years old.

Taking both of these methods into account I decided to conduct my own trial by putting three drops of Wettasoil in a cup of smoke water (which I make myself) and the results have been amazing - approximately 90% germination of two year old seed.

We are currently working on potting on trials to determine the best mix for growing on. Flannel flowers are quite susceptible to root disturbance so it's better to pot them on once only. Flannel flowers are also quite susceptible to *Botrytis* during moist weather and should be monitored and treated with appropriate fungicide if necessary. Fungal problems can be minimised by avoiding foliage wetting during irrigation and by periodically removing dead leaves from lower areas of the stems to improve air circulation.

* Wettasoil is what it sounds like, a liquid soil wetting agent. It does not appear to be available in the UK though products that perform a similar function are.

**Acknowledgement**

This article is an abridged version of one first published in Genus, the newsletter of the Garden Plant Conservation Association of Australia (GPCAA). Maria Hitchcock (coolnatives.com.au) is a life member of the Australian Native Plants Society (Australia), former leader of the Correa Study Group, and currently leader of the Waratah and Flannel Flower Study Group. She has over 30 years experience of growing frost and drought hardy Australian native plants, holds the Australian National Correa Collection, and is the author of several books.

**Can't get into the members area of the APS website?**

For a password contact Ben at webmaster@anzplantsoc.org.uk.

# MY WAY WITH ROOTED CUTTINGS

Gary Firth

The standard way to take rooted cuttings (as illustrated *ad nauseum* by *Gardeners World* and the RHS Journal *The Garden*) is to arrange a number of softwood or semi hardwood cuttings around the sides of a terracotta or plastic pot in free draining compost, cover the pot with a polythene bag, and place in the warmth until new growth starts to appear.

This works very well for many popular plant cultivars such as fuchsias and pelargoniums. However there can be problems with this approach. Slower rooting material may rot before a good root system is produced. It is not always that easy to tell when the cutting has rooted; new growth may start to appear before a good root system has formed; and the rate of rooting may vary for similar looking material in the same pot. Removing those that have rooted will often disturb those that have yet to do so. Furthermore if you wish to take small numbers of cuttings from a large range of different subjects this can take up quite a lot of space.

As a National Plant Collection Holder I manage my collection by regularly taking just a few cuttings from a wide range of species and cultivars from across 13 different genera. Having experimented with many different techniques over the years, including complicated automatic misting systems, I now most commonly use individual rooting blocks. Several types are available. I find that some, such as rockwool cubes, tend to remain too moist and result in high loss rates in my hands (although they are very useful for rooting some types of orchid 'backbulbs' such as cymbidiums). I have now settled on the use of Root Riot cubes, made by Growth Technology and marketed by companies such as Two Wests and Elliot. These are small organic cubes made of ground coir with an organic polymer containing micronutrients and beneficial fungi with an optimal air/moisture content. They have a spongy feel and are said to be biodegradable (albeit very slowly).

I use up to 40 cubes at a time in inserts in a standard seed tray. My cuttings (either softwood or semi hardwood) are dipped into a liquid rooting hormone such as Clonex and pushed into the ready made hole in each cube (photo page 20). I then place a standard clear cover over the seed tray and place it somewhere warm and out of direct light. Now we come to the greatest advantage of these cubes: at regular intervals I simply take the cubes from the tray using forceps or large tweezers and inspect for roots growing out from the cube (photo page 20). Depending on the results it can either be potted on without any disturbance or returned to the tray for a longer period. If cuttings drop their leaves and appear to have died they are simply removed and a new cutting put into the cube – so nothing is wasted.

I have generally achieved very good results using this technique: up to 100% take with easy material such as *Myrtus communis* and still acceptable rates of around 30% with more difficult cultivars such as *Lophomyrtus* x *ralphii* 'Little Star'. I have also used it successfully for a range of Hebe cultivars, where the strike rate often approaches 100%. The only down side is the cost - around 25 pence per cube – but then there is little wastage as I

am generally able to reuse the cube if the original cutting fails. Virtually all the plants from cuttings that I sell at Hampton Court, Open Garden days and other shows are now produced using this technique.

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# GROWING CORREAS

Judy Clark

I have been growing correas, evergreen shrubs known in the northern hemisphere as Australian fuchsias, for over ten years. I obtained my first plants in 2003, when I was still pretty much a novice when it came to Australian plants. I suspect it is more by good luck than good management that two out of the three still survive in my garden: the variegated white correa *Correa alba* var. *alba* 'Starlight' and *C. decumbens* (spreading correa). However my next acquisition, *C. glabra* (rock correa) purchased in 2004, did die, in 2006. At the time I thought cold could have been the culprit but now I wonder if it was my incompetence as we have had colder winters since.

That same year, 2006, I purchased *C. backhouseana* (coastal correa) from Logan Botanic Garden and in summer 2008 Tim Darrington gave me two cultivars, *C.* 'Marian's Marvel' and *C.* 'Mannii'. All three came through the three depressingly cold winters that followed, but it is just coincidence that I didn't try any more correas during that period, when cold might have done for them before they become established. In 2011 I bought *C. alba* (white correa), from Ventnor Botanic garden. It turned out to be the cultivar 'Pinkie' while my next purchase, sold as *C. lawrenceana* (mountain correa), proved when it flowered to be the cultivar 'Ivory Bells' (a cross between *C. backhouseana* and *C. alba*).

As I accumulated correas I found myself more and more taken with them as garden plants. Their striking bell shaped flowers come in a variety of glowing colours (photos page 22) and, being produced from autumn to spring, provide cheer all winter long. In 2012 I began to actively seek more of them, and my collection began to grow rapidly. That same year, quite serendipitously, I discovered Maria Hitchcock's book *Correas: Australian Plants for Waterwise Gardens*[1]. It has proved invaluable not only for reliable information about their cultivation but also for helping me avoid mistakes that might have led to loss of plants, and for helping with identification. Now I have about twenty different taxa. (The 'about' is because correas are not easy to identify, some cultivars are quite similar and the same plant can be found under different names.) In 2015 I became a Plant Heritage National Collection Holder, and I hope to help promote the wider cultivation of these modest but stunningly beautiful plants.

Most of my collection is planted outside in my small garden in Hastings. It faces south east and is about 500 m from the sea. Correas like a temperate climate and my site in Hastings seems to suit them well[2]: not too wet (average annual rainfall is 751 mm) and not too cold (mean minimum temperature in February is 2.7°C). The average number of air frosts per year is 20.3 but ground frosts are not that frequent because my garden is near the top of a hill and slopes away gently. In some ways the climate is not too dissimilar to the climate in Armidale in the northern tablelands of New South Wales, the location of the Australian National Correa Collection, where

heavy frosts are common in winter and the temperature can get to -15$^0$C, and summer temperatures are mostly cooler than elsewhere in Australia[1]. However I suspect that in Armidale frost mostly burns off during the day whereas here in the UK there can be periods of prolonged cold.

Correas generally need pretty good drainage to thrive (don't most Australian plants?) but if the drainage is good they will grow on a range of soil types[1]. My garden is on Wadhurst clay and over the years I have added lots of grit and lots of organic matter, not to mention the odd bags of sand and topsoil, to try and improve matters. When I plant a correa I usually mix more compost and grit with the soil in the planting hole and if the hole drains particularly badly I mound the plant up a little. I water new plantings as necessary until they are established. Correas might not like wet feet but they don't tolerate drying out either.

If you purchase a correa from a garden centre, or even from some specialist nurseries, you may well read on the label that it should be grown in full sun. However in their native habitat many correas grow in shady situations, for example as understorey species in open forest, in damp gullies and at the base of taller shrubs and trees, and in cultivation they do well in similar situations. Even the coastal species, *C. alba* and *C. backhouseana*, don't mind some shade, while *C. lawrenceana*, a forest plant, prefers semi-shade.

I grow all my correas in partial or dappled shade, beside or under taller plants, or in the lee of the boundary hedge. There are several advantages to doing so. One, which probably applies more to exposed coastal gardens like mine, is that they get some protection from the strong winds that we experience from time to time, winds strong enough in recent years to rock the roots of even quite established plants. Another is that it helps to shield correas' shallow roots from the sun, though I also mulch my plants with grit to conserve moisture,(something that also helps protect their roots from cold. But perhaps the main benefit of overhanging trees and shrubs is that they provide natural protection from frost and snow. My small lawn can be covered in white stuff, yet there can be hardly a sign of it on the beds.

Correas also grow well in containers. Several specimens in my collection are in pots which are kept outside in summer and over-wintered in my just frost-free greenhouse. I do intend to plant them out, but not until I have successfully propagated them.

Propagation from cuttings is not difficult, though some species and cultivars take more easily than others. I generally take semi-ripe cuttings in summer and autumn. I use a 3:1 perlite coir mix and dip the cutting end in Clonex hormone rooting gel. Last year I started my cuttings off with bottom heat which markedly improved my results. I have not tried growing plants from seed, which is said to be difficult. In Australian gardens self seeding is common[1] but so far this hasn't happened in my garden, probably because there aren't any wattlebirds or honeyeaters around to pollinate my plants. I live in hope!

My experience is that correas are relatively slow growing (though my plants might grow faster if I remembered to feed them). It is only in recent years that I have pruned any of them, by which time some of them had got quite leggy. Light pruning in



left:
***Hebe elliptica,*** tough as old boots

below:
***Lomatia ferruginea*** from Chile





above:

**Flannel Flower, *Actinotus helianthi***, in a Melbourne garden

It looks a bit like a daisy but is a member of the carrot family.





above and left:

**Propagation with cuttings using Root Riot cubes**



left:
***Athrotaxis selaginoides***,
one of a matching pair at Castlewellan Arboretum in Northern Ireland

below right:
***Athrotaxis cupressoides***,
foliage and immature cones

below left:
***Athrotaxis selaginoides***,
foliage and immature cones











Clockwise, from top left:
***Correa decumbens***
***Correa glabra* var. *glabra***
***Correa* 'Mannii'**
***Correa* 'Marian's Marvel'**
***Correa* backhouseana**





spring, after the danger of frost has passed, keeps plants compact, an advantage in a small garden, and they flower better.

Leggy plants are also more susceptible to broken branches. The greatest scourge of correas in my garden is prowling animals such as cats, foxes and badgers (not to mention the odd careless gardener) as their somewhat brittle branches are easily snapped off. I've not had to deal with grapple with any other pests or diseases, though being members of the Rutaceae (citrus family) correas could be susceptible to scale insects.

So there you have it. Correas are very beautiful, pretty easy to grow, and flower when there is little else to brighten up the day. So why are they not more widely grown in the UK? One reason may be their reputation for being tender. Clearly my garden is in one of the milder areas of the country and so is not the best location to test their hardiness. But do they deserve an RHS classification of H2**?** That is, tolerant of low temperatures (1 to $5^0$C), but not surviving being frozen, and requiring glasshouse conditions in winter except in frost free inner city areas and coastal extremities[3]? I don't think so.

All correas listed in Ross and Irons[4] (1997) are said to be able to cope with at least -5ºC in favourable conditions. After the winter of 2010-11, when he lost both *C. alba* and *C. backhouseana* from his garden in the Wirral, Jeff Irons did revise his opinion that these species are *always* reliably hardy in much of the UK[5], but that was a winter of prolonged periods of low temperatures with ice and snow and frost. Prolonged cold is far more damaging to susceptible plants than a single cold night, when plants can survive temperatures lower than the minima experienced during long cold periods. Prolonged cold plus wet feet is even more damaging.

With good drainage, some overhead protection, and maybe a bit of fleece during a protracted cold spell (although I have never had to do this), I think many of us could grow correas successfully. Anyway, in my view growing Australasian plants means taking risks. I would far rather have had the pleasure of growing these wonderful plants and then lost them to the capriciousness of the weather than never have grown them at all.

**Notes**

1. Hitchcock, M. 2010. **Correas: Australian Plants for Waterwise Gardens**. NSW: Rosenberg Publishing

2. Data in this paragraph is from the Met Office, www.metoffice.gov.uk/climate

3.www.rhs.org.uk/plants/pdfs/2012_rhs-hardiness-rating and www.rhs.org.uk/plants/search-form

4. Ross T. and Irons J. 1997. Australian Plants: A Guide to their Cultivation in Europe. Frankfurt: Privately published.

5. Jeff Irons pers. comm..

**Do you grow any correas?**

I am always on the lookout for correas to add to my collection. Many that used to be available are no longer offered by nurseries but may well still be present in gardens. I am particularly keen to obtain *Correa alba* with pure white flowers, *Correa baeuerlenii* (Chef's Cap Correa), any plant labelled *Correa reflexa*, and the cultivars 'Yanakie', 'Crane's Hybrid', 'Di's Favourite', 'Federation Belle', 'Harrisii', 'Kane's Hybrid', 'Inglewood Gold', and 'Poorinda Mary'.

# ATHROTAXIS: A TASMANIAN ENDEMIC GENUS

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*Athrotaxis*, a small genus in the family Cupressaceae, is endemic to Tasmania. It comprises two distinct species, *A. cupressoides* and *A. selaginoides* together with a naturally occurring hybrid which has intermediate characteristics and has been given specific rank as *A.* x *laxifolia*. The two species were first collected by Ronald Gunn in the mountains near Launceston in 1833. He subsequently sent herbarium specimens to John Lindley who passed them on to David Don who named and published them in 1839[1].

Ronald Gunn subsequently sent an herbarium specimen of the hybrid to WJ Hooker who published it as *Arthrotaxis selaginoides* Don., with a botanical illustration, not realising it was different, though he admitted to having mislaid or not received the notes on Tasmanian conifers produced by Ronald Gunn[2]. Nevertheless, this publication stands as the first description of *A.* x *laxifolia*, despite the misspelling of the genus name.

According to Bean (1981), all three species were introduced into cultivation in the British Isles about 1857, though he does not say where or by whom. He goes on to mention that none are particularly tender and fair sized specimens of all three are to be found in Sussex and Surrey, but they are better suited to the south west and Ireland. Along with the descriptions of each species significant specimens are mentioned with their heights pre 1970[3].

One of the earliest recorded introductions must be *A. cupressoides*, which was introduced at Tresco in 1865, and may still survive[4]. Sir John Ross of Bladensburg was growing all three species at Rostrevor House in 1911, but they would have been fairly young plants, and none seem to have survived[5]. In 1930 Edgar Thurston listed the gardens in which the various species were growing along with their heights in the gardens in the county, some of which were likely to be fairly early introductions[6].

The 1932 report on the RHS Conifer conference provides the most comprehensive coverage of conifers being grown in the British Isles, at that time in most of the major gardens and parks. It also includes statistical returns from many of the gardens listing species grown, their height, girth and spread, and in many cases their age. A cursory comparison of what was growing and where indicates that Bean was correct on his assessment. Those *Athrotaxis* growing in Ireland and the west of the British mainland were doing better, with the three species at Bedgebury, now the National Pinetum, only managing to reach about 60 cm high in 10 years[7].

Only a few of the largest known specimens are mentioned by Owen Johnson (2011). He suggests that all members of the genus are quite rare in cultivation[8].

The excellent book *Tasmania's Natural Flora*, now more readily available in its 2nd edition, provides good detailed summary descriptions and photographs of all three species[9]. and vulnerable in their natural habitat.

*A. cupressoides*, known as the pencil pine in Tasmania, has, as its name suggests, a narrow upright conical

appearance, with predominantly upward growing branches, which in maturity can become rather open. The dull dark green leaves tightly clasp the stems (photo page 21). It grows at higher altitudes than the other two species, and its maximum height can range from 8 to 20 m, with a narrow upright conical appearance.

*A. selaginoides,* commonly known as the King Billy pine after an indigenous aboriginal chief, has slightly broader pointed leaves which grow outwards from the stems, giving a more prickly appearance and a lighter warmer green colour (photo page 21). Younger plants retain a dense foliage down to ground level, but top growth can become more open in mature trees. It grows at lower, more sheltered elevations and can reach 15 to 40 m, with a broader conical form (photo page 21).

*A.* x *laxifolia,* commonly known as the hybrid pencil pine, has foliage of an intermediate shape but surprisingly of a paler, more yellow green colour. It can reach 6 to 20 m and is broader growing than the two parents, only forming a shrub at higher elevations. It grows more broadly than the parents but still in a roughly conical form.

Of the three species, *A.* x *laxifolia* is apparently the best garden plant, and can even make a good pot plant for some years. All species are quite slow growing.

I grow only the two species. The oldest one is *A. cupressoides,* which I obtained about 20 years ago, albeit under the name *A. selaginoides*. I had long since forgotten that I had acquired any *Athrotaxis* when, going round the garden with some visitors a few years ago, one of them suggested it was *A. selaginoides*. I didn't think it was, as the year before Jeff Irons had generously given me one of the few he had raised from seed, which though barely 20 cm tall had very different foliage. I was surprised that the plant still had the original label that I had planted with it, which rather embarrassingly bore the name *A. selaginoides*. I remained unconvinced, and agreed to disagree with my visitor. I subsequently found suitable evidence in the form of line drawings of the foliage of both species[10]. I was able to email a scan of the illustrations to my visitor, as well as reliably identify the tree correctly. My correctly named *A. cupressoides* is now about 5 m tall.

After a year I planted out the small true *A. selaginoides*. It has grown quite well despite being in quite poor soil, and rather crowded by surrounding plants. In autumn 2014 I moved it to an adjacent, more open area, which I had cleared and then enriched the poor shallow soil with some horse manure well broken down amidst wood shavings, which would at least add some nutrients and humus. In the 5 years since I planted it out it has reached 1.2 m, so the genus clearly grows a little faster in the moister and more humid climate of County Down that in the dryer and warmer conditions at Bedgebury.

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### *Athrotaxis* and fire

In January 2016 bushfires ignited by lightning storms burned large areas in northwestern Tasmania, including almost 2% of the region's World Heritage wilderness lands, areas which contain a high percentage of endemic flora. Fires were still burning in February.

Unlike species of mainland forests which regenerate after fire, *Athrotaxis* are not fire adapted. Fire kills not only the trees but also their seeds, and worse still, the peaty soils in which the plants grow may burn too. It is thought that parts of the Central Plateau (within the World Heritage Area) will never recover.

For more information see Nature 530, 137–138 (11 February 2016) and www.anbg.gov.au/fire_ecology/fire-and-biodiversity.html.

# MY SPECIAL PLANTS

Morwen Tregudda

***Araucaria heterophylla*: Norfolk Island Pine**

Really a Pacific Island plant, *Araucaria heterophylla* (syn. *A. excelsa*) is politically Australian. This is the oldest and largest plant in my collection, now dominating the living room windowsill. Nearly five feet tall and with branches nearly three feet long, its branches poke through the living room curtains at night like a scene from *The Day of the Triffids*. I bought this plant in October 1984, a weedy little thing shivering in the cold rain at Llangefi market. Potting on revealed that I had two plants, of which only one survived and throve. It has always stayed indoors, potted on and moved many times. I now control its height by removing the leading shoot when it nears the ceiling, and it keeps on growing!

***Cissus antarctica:* Kangaroo Vine**

This plant came from "Death Row" in Edmonton Market in 1996, a collection of dead and dying houseplants marked "Bargains, £1", of which this Aussie seemed the only survivor. Several pots and several houses later it shares the araucaria's windowsill and is outgrowing its climbing frame, with a recently bought junior beside it.

***Dicksonia antarctica:* Soft Tree Fern**

This, the first of my three tree ferns, was bought locally soon after I moved back to Penwith in Cornwall in 2008, and is given pride of place on the back patio. It lives there most of the time but is brought into the kitchen during severe winter weather, as in January 2010 when it stayed for three weeks. As it is growing slowly I expect to be able to protect it in this way for many years to come. Like all my ferns it is sprayed every morning with lukewarm water, and fed on diluted liquid seaweed plant food.

***Schleffera actinophylla:* Umbrella Tree**

This is the second oldest plant in my Australasian plant collection, found by chance in 1985 on a visit to the

Cotswolds. My mother and I saw furniture being smashed up outside a house and thrown into a skip and asked if we could have some items. The owner told us the house and garden were being cleared for complete renovation and we could take whatever we liked, so into our wheelbarrow went the schleffera, a ceanothus and several roses. Why this Queenslander was planted out in a cold Cotswold garden I will never know. I didn't know what it was at the time but I saved it for its exotic appearance. It now lives on a windowsill most of the time, with summer holidays in semi-shade in the garden if there is enough warm dry weather.

***Wollemia nobilis:*** **Wollemi Pine**

Having eagerly followed news of the discovery and propagation of this tree I was deterred from buying one by the high prices. Finally I got one in a sale at Trevenna Cross Nurseries in 2010. Plant theft is rare here but, because of its value, I keep it on the back patio with the ferns. It has been potted on twice and is now nearly five feet high with bright green cones and new branches. It seems to withdraw energy from its older lower ones, so they turn brown. I am unsure whether to remove them, or wait and see if they will be shed.



# THE GENUS LOMATIA

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The genus *Lomatia*, like the whole protea family, has its origins in the Jurassic period, prior to the break-up of Gondwana. Members of the Proteaceae are thus confined to the southern hemisphere and occur primarily in South America, South Africa and Australasia, but with a scattered distribution of some genera in the East Indies.

The monoecious genus *Lomatia* contains 12 species and is only found in South America and Australia. Three older extinct species have been discovered in the fossil record of Patagonia[1], which would confirm that this is where the genus originated, and when the climate was more tropical. The earliest two, including an apparent ancestor of *L. ferruginea*, go back to the Eocene Epoch whilst the third species only apparently occurred in the late Oligocene and early Miocene Epochs, towards the end of the Jurassic period. Most species in the genus have quite variable foliage.

The current distribution include three species in South America: *L. dentata* and *L. ferruginea* in Chile and Argentina with the range of the third species *L. hirsuta* extending further north into Peru. Another three species, *L. polymorpha, L. tasmanica* and *L. tinctoria* are endemic to Tasmania. The remaining 6 species are endemic to the Australian mainland. *L. myricoides* occurs in southeastern Australia; *L. arborescens, L. fraseri, L. ilicifolia* and *L. silaifolia* occur in eastern Australia; and *L. fraxinifolia* occurs further north in Queensland.

All species should be hardy enough to grow in at least the mildest parts of the British Isles, and indeed most are or have been grown, though there is no evidence that *L. polymorpha* has ever been in cultivation in the British Isles. *L. ilicifolia* was briefly in cultivation at Kew in the early 1840s with winter protection of a frame. It does not seem to have survived for long, though it did flower which enabled it to be published in the Botanical Magazine[2].

There is no mention of it or *L. polymorpha* in the RHS Journal indices up to 1985, in Bean[3], in Krüssmann[4], or in the book New Trees, which does not even cover the genus.

Bean[3] records that Harold Comber collected seeds of *L. dentata*, but there is no record of plants being raised successfully. *L. dentata* was subsequently introduced in 1963 from wild collected cuttings which were rooted at Kew and planted out at Wakehurst Place, despite being deemed to be less hardy than *L. hirsuta.* Krüssman[4] records that the same introduction has also been grown at the Sir Harold Hillier Gardens, though it does not seem to have survived there as it is not mentioned as growing there in the 2014 edition of Hilliers Manual[5]. *L. dentata* is listed in the 2015-16 Plant Finder as available from several sources, but it would seem to be of limited or doubtful hardiness. However, the plant I obtained some years ago as *L. dentata* turned out to be *L. hirsuta*, though I can't remember where I obtained it.

*L. silaifolia* is also of questionable hardiness, though it has successfully been grown in the south and south-west of England in the past[6] and apparently survived and flowered at the Sir Harold Hillier Arboretum for many years[5]. Most plants available under that name in recent decades are more likely to be *L. tinctoria*. A plant of *L. tasmanica*, despite propagated plants being problematical to keep in cultivation, was grown in the old pyramidal alpine house at Kew, but was presumably lost when the alpine house was demolished. *L. arborescens* has recently been introduced into cultivation at Logan Botanic Garden.

**The establishment and development of the genus.**

The three South American species were first discovered by Ruiz and Pavon on their 1778-88 expedition to South America, but were not named and published until 1798, albeit as belonging to the genus *Embothrium*[7]. This genus was discovered by JR and G Forster when accompanying Lieutenant Cook on his second voyage around the world, and described on their return in 1776[8].

However, it was actually an Australian species that was the first to be described and published. *L. silaifolia*, from southeastern Australia, was also first published as an *Embothrium, E. silaifolia*, by Smith in 1793[9], though who sent or brought back seeds of it to England is not known. The specimen illustrated by Smith came from the Kensington nursery of Messrs Grimwood.

This was followed by the rather similar species, *L. tinctoria* from Tasmania, published by Labillardieri in 1805[10] after he had returned from a 3 year voyage to the Antipodes[11], and again classed as an *Embothrium*. He illustrated two different forms of it, one of which was given specific status, as *Lomatia polymorphora*, five years later by Robert Brown in his substantial paper on the Proteaceae[12], in which he established many new genera including *Lomatia*. In the same paper Brown published a new species *Lomatia ilicifolia* as well as *Lomatia longifolia* referring to a species previously described by Gaetner as *Embothrium myricoides*, and published three years earlier[13]. This surprising error by Brown, of changing the specific name when he was aware of Gaetner's prior naming of the plant, led to the shrub being known in cultivation

for almost two centuries as *L. longifolia*. The correct name *L. myricoides* has only become widely used in the last couple of decades, despite being corrected by Karel Domin in 1921[14]. Whilst Brown also reclassified the three *Embothrium* species named by Ruiz and Pavon, one, *E. obliqua*, had already been published by Lamark as *E. hirsuta*[15], and so this earlier name was transferred to *Lomatia hirsuta* by Diels in 1937[16]. Again the revised name took quite some years to be adopted in horticultural circles.

In 1830 Robert Brown described another new species, *Lomatia fraseri*, when he published a supplement to his 1805 Prodomus[17]. It was 40 years before another species was named, *Lomatia fraxinifolia*, described by Mueller in 1870. The last Australian mainland species in the genus, *Lomatia arborescens*, was not described until 1937, by Fraser and Vickery[18].

It was a further 30 years before the last species in the genus was described and named *L. tasmanica* in 1967 by Winifred Curtis[19]. When it was first discovered in 1934, by amateur naturalist Deny King, the plant was not in flower. He collected specimens of the foliage and subsequently took them to the Tasmanian Herbarium in Hobart, where they could not be identified. Specimens were subsequently sent to Kew where it was also not possible to identify the plant without flowers. In 1965 members of the King family went to where their forbear had originally found the plant, at Cox Bight, on the southernmost coast of South West Tasmania, and managed to re-discover the plant which fortunately was in flower[20]. It is known colloquially as King's Lomatia. It is triploid and therefore sterile, and considered to be the oldest clone in the world, with an estimated age of 43,600 years. Whilst not very tall growing, it has gradually spread by branches layering and one of the two existing plants in the wild has remarkably spread to a distance of 1.5 km across.

**The species: Chile**

*Lomatia ferruginea*, which is known locally in Chile as fuinque as well as by several other names in different parts of the country, has a range from Region VII to XII[*]. It is the most attractive species in the genus, with evergreen fern-like foliage and clusters of red coloured flowers (photo page 19), though as the foliage tends to camouflage the flowers they are less conspicuous from a distance. Some of the older foliage dies off about the same time as the trees begin flowering; its butter yellow colour is a good sign of the tree coming into flower. It is the tallest growing species in cultivation, having reached 16.5 m tall in moist conditions at Castlewellan Arboretum in 1994[21] though it was subsequently lost before the millennium. In the wild it is considered to only reach 10-15 m [22, 23]. My specimen has reached 9.5 m in less than 25 years, growing in moist soil. It grows best in a cool, relatively humid climate and moist soil, and whilst initially relatively upright in growth, it produces multiple boughs rather than a single trunk and the branches spread out considerably as the tree matures.

This species was first introduced into cultivation by the Veitch Nursery, from seed collected by William Lobb on his trip from 1845-8. It was first illustrated in 1909 in the Botanical Magazine[**] (tab. 8112), at the time it first flowered in cultivation at Castlewellan, and when the tree was only 2.5 m tall. It's unlikely that the

Castlewellan tree was raised from the original seed collection over 50 years previously. So it is reasonable to assume that earlier cultivation of the plants from the Lobb collection was not successful for long, probably because the plants were not very tolerant of hot dry summers. Surprisingly it is tolerant of occasional inundation by the sea, as first mentioned by Cavanilles[24], who may have been the first to describe the species[25].

*Lomatia hirsuta*, which is known colloquially as radal and by other names locally, has a range from Region IV to X in Chile and further north into Peru. It has broadly ovate glossy dark green leaves with serrated edges and clusters of greenish-yellow flowers. It usually forms a single trunk before branching out and in the wild it reaches about 15 m tall[22a]. The champion tree in the British Isles is at Benmore, now an adjunct to Edinburgh Botanic Garden, and has reached 11 m high[21]. I grow a small plant acquired some years ago, albeit as *L. dentata*. It is badly sited in shade and closely surrounded by larger plants, so whilst the leader has reached about 2.4 m, two low level branches have grown out towards the light, giving the appearance of a broad open bush. It is too young to flower. It is not a particularly attractive tree and thus unlikely to be widely grown.

*Lomatia dentata* is known as pinol and various other local names, with a range between Region IV to X. It has deep green leaves that are narrowly obovate and slightly dentate, primarily from the broadest part of the leaf to the rounded tip. It grows to about 10 m in the wild, but retains branches and foliage to ground level giving the appearance of a very large broad bush.[22b]. It has small clusters of pale yellow or white flowers. It does not seem to very hardy as previous introductions to the British Isles have not survived in cultivation for long. It may grow at lower altitude s than *L. hirsuta* with a similar habitat distribution. Three suppliers of *L. dentata* are listed in the Plant Finder but is likely to prove hardy only in mildest locations, and like *L.hirsuta* it is not a very decorative species.

**The species: Australia**

*Lomatia myricoides* comes originally from New South Wales and Victoria, and, being fairly hardy, it is the most widely available species of the genus in the UK, judging from the number of nurseries listing it in the Plant Finder. It may thus be the most widely grown Antipodean *Lomatia*. It is an irregular open growing shrub from 1 to 2.4 m tall according to Hilliers Manual[5a], and can be almost as wide, though the online Flora of Australia, describes it as a shrub or small tree reaching a height of 6 (-8) m.

*L. myricoides* has long and very narrow green or grey-green leaves, up to 20 cm long and 2 cm wide, with slight and irregular toothing; overall the leaves are quite variable. The small panicles of flowers, are greenish in bud opening white, cream or rarely pale pink[5a] (photo page 31). It is apparently best grown in light shade, but is not particularly elegant. My plant has reached almost 5 m high, and about 3 m irregularly across in a couple of directions, but is rather sparse so can only really be considered as a curiosity for collectors of the unusual. Despite being about 20 years old, it only flowered for the first time in 2015, and very sparsely at that, though should be more free flowering in conditions that suit it better. It is illustrated as *L. longifolia* in the Bot. Mag. tab. 7698.





**Lomatias in flower:**

above:
***Lomatia myricoides***

left:
***Lomatia tinctoria***

below:
***Lomatia tinctoria***,
single flower





***Lomatia tinctoria***

Above: variation in foliage size: the large leaflet is the equivalent of one of the side leaflets of the smaller form.

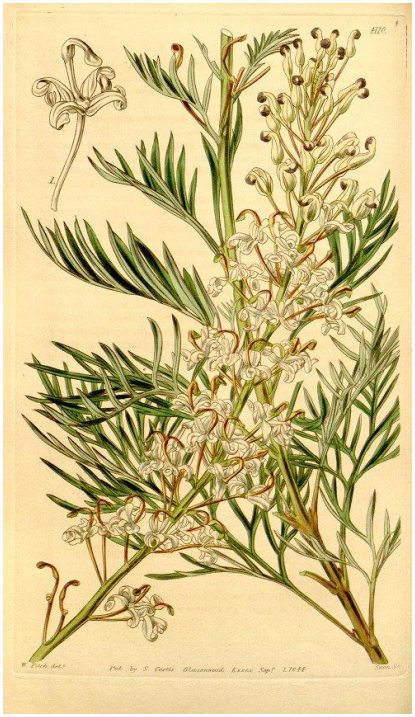
Below: illustrated in the Botanical Magazine, tab 4110.

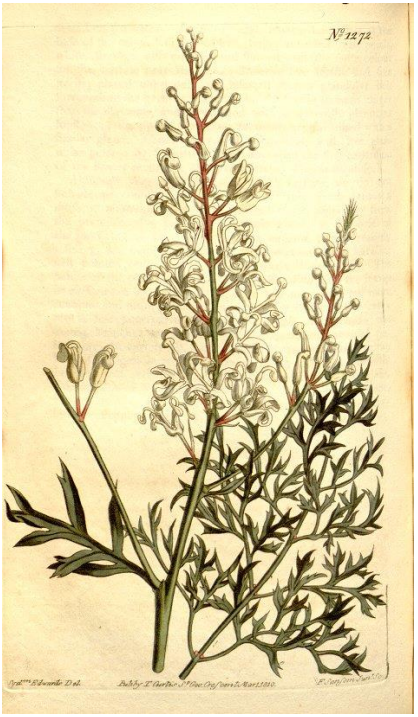


***Lomatia silaifolia***

Above: young plant for sale at Kuranga Native Nursery, Mt. Evelyn, Victoria.

Below: illustrated in the Botanical Magazine, tab 1272.





*Lomatia fraseri* is also indigenous to New South Wales. Surprisingly it is a relatively recent introduction into cultivation in the UK. It was introduced, most likely in the early 1980s, from seed raised by the late Lady Jean O'Neill of the Main[5] in her garden near Lymington. She obviously gave a plant or some seedlings to her friend Peter Chapple of Spinners who subsequently introduced the plant commercially about 15 years ago. Other nurseries now list it. Lady O'Neil must also have given a plant to Lady Anne Palmer for her garden at Rosemoor, before she transferred ownership to the RHS in 1988, though whether it survived the restoration of her original garden is questionable. It was a small shrub when I saw it in the early 1990s when Lady Palmer's garden was in a rather tired untouched state.

*L. fraseri* is broadly similar to *L. myricoides*, but more densely growing and more attractive. It grows to about 8-10 m tall and has variable deep green leaves with a slight glossy sheen, paler below, which are about twice the width of those of *L. myricoides* in the form in cultivation. Images on the Australian National Botanic Gardens web site (www.anbg.gov.au/) show remarkable variation in leaf shape, with some forms looking more like relatives of holly. The short panicles of flowers (photo, front cover) can be white, yellow or pale green, and emerge in pairs from the leaf nodes near the end of branches. My plant has reached 6 m tall in just over 12 years but has only produced a few flowers on a couple of occasions. Unfortunately, the species does not seem to be very wind hardy as two substantial branches were broken off during recent winter storms. Whilst my garden is on an exposed site, the specimen of *L. fraseri* was in a well-sheltered spot, or so I thought. Fortunately there is plenty of new growth sprouting. Some of the older and thin longer branches tend to droop significantly but most are stout enough not to do so.

*Lomatia silaifolia* occurs in both south east Queensland and New South Wales. It is uncommon in cultivation but does grow at Hillier's Arboretum. Plants for sale listed as *L. silaifolia* usually turn out to be *L. tinctoria*, as the two species can be easily confused It is a small to medium shrub up to about 2 m tall. It grows from a lignotuber so therefore cannot form a spreading clump, despite being described as broadly spreading, so it is likely that the stems form a narrow clump at their base and either grow outwards or flop outwards. This may be the easiest way to differentiate it from *L. tinctoria* which forms a slowly spreading clump.

This species has apparently grown well and flowered at the Sir Harold Hillier Arboretum for many years, though the plant labeled *L. silaifolia* at Wakehurst Place would appear to be *L. tinctoria*. The much divided leaves are very variable and can be pinnate or pinnatisect or even tri-pinnate or tri-pinnatisect, with the leaf segments noticeably broader than those of *L. tinctoria*, in most cases (see photos opposite). It has terminal panicles of white or cream flowers . In the wild it is apparently more likely to flower on new growth after a bush fire, so it may not flower well in cultivation, though possibly a top dressing of wood ash might encourage flowering. It was illustrated in the Bot. Mag. (tab. 1272). Comparison with *L. tinctoria* (tab. 4110) shows a significant

difference in foliage (photos page 32), though given the variability of the foliage of both species neither image can be deemed to be typical.

*Lomatia tinctoria* is indigenous to Tasmania and is the second most common Australian member of the genus in cultivation, judging from the number of nurseries listing it. It gradually forms a clumping shrub to about 2 m tall, with pinnate, bipinnate, pinnatisect or bipinnatisect leaves. The flowers occur in terminal panicles (photo page 31). My plant is over 20 years old and at least 1.8 m across at ground level, with the tallest stems almost 2.4 m tall. However, the relatively thin stems cannot properly support the weight of the branching foliage at their top, and so the tallest stems flop over, cascading out in all directions, making the shrub over 3 m across. It flowers regularly, if not always prolifically, but has rarely set seed, though I recently discovered one small seed capsule. In recent years it has started to send up small suckers, some up to almost 1 m away from base of the clump. My clump is growing in relatively shallow and poor soil, constrained on one side by an outcrop of dolerite rock, the same type of rock that underlies most of Tasmania. It is illustrated in the Bot. Mag. (tab. 4110). A second form I grow was obtained as *L. silaifolia* but turned out to be a dwarf, and very small leafed form of *L. tinctoria*; it is probably a high altitude form (photo page 32). It has so far shown a reluctance to increase from a single branched stem and at almost 1 m tall has not yet flowered.

*Lomatia polymorpha* has, as the name suggests, very variable foliage. It forms an erect to spreading shrub 1-4 m tall, similar to *L. tinctoria* but with entire narrow variably shaped elliptical leaves, the underside of which are densely ferruginous-tomentose. The flower spikes can be terminal or auxiliary, and appear to be larger and denser than those of *L. tinctoria* [26]. It occurs in wet areas from sea level up to 1,200 m, and needs moist well drained soil in cultivation. It would not appear to be, or ever has been, in cultivation in the British Isles, which is perhaps surprising as it appears to be almost as attractive as *L. tinctoria*.

*Lomatia tasmanica*, unlike all other Australian species, has red flowers. It is unique in another way, in that it is only known from one single ancient clone, which has repeatedly layered branches from the original surviving plant, and the offspring have apparently spread from it. It has similar, though smaller, fern like foliage to *L. ferruginea*, though the foliage can vary to broader spiky leaflets. The flowers are deep red, whereas those of *L. ferruginea* are paler red and the petals have white bases and tips. They are clearly closely related, though *L. tasmanica* apparently only grows to about 1.5 m high. It can be propagated by layering, with roots growing from leaf joints, but most layers tend to be short lived.

*Lomatia ilicifolia* is a low shrub up to 3 m tall with very variable foliage, even on the same plant, and with terminal flower spikes. As its name implies the very variable leaves bear a resemblance to those of holly. It was briefly grown in the 1840s at Kew and was illustrated in the Bot. Mag. (tab 4023). It was apparently growing on Tresco in 1985, having been introduced in 1974[27]. However it may not have survived the unusually cold

winter of 1987, which devastate d many of the tender plants at Tresco[28]. On-line photographs indicate that it is not quite as attractive as the Bot. Mag. illustration would suggest.

*Lomatia fraxinifolia* is a shrub or tree, which can reach up to 24 m tall, and has ash like foliage as the specific name implies. It occurs in north-eastern Queensland and is thus unlikely to be very hardy in the British Isles. Surprisingly it was listed in Marchant's 1937 catalogue[29], which probably had an unrivalled listing of six members of the genus. It was in cultivation at Logan Botanic Garden in 2006 but whether it survived the bad winters of 2010 and 2011 is questionable. Owen Johnson reports that it is also grown at Ilnacullan in the south of Ireland[30].

*Lomatia arborescens* is a shrub or small tree up to 12 m tall. The leaves are simple, entire to serrate or dentate, and narrow to broadly ovate, elliptical or obovate. It occurs in several localities in the north-east of New South Wales and the south east of Queensland. Owen Johnson in his Tender Tree report, notes that it has now been introduced to cultivation and grown at Logan Botanic Garden[30] but like *L. fraxinifolia* it may well not have survived the bad winters of 2010 and 2011.

Members of the genus *Lomatia* are not as spectacular or ornamental as some other genera in the protea family, apart perhaps from *L. ferruginea*, which will only grow really well in moist conditions in a relatively cool and humid climate. Several species such as *L. dentata, L. fraxinifolia, L. arborescens* and *L. ilicifolia* are not very hardy, nor particularly attractive. Others such as *L. tasmanica* and *L. silaifolia* are apparently problematical to grow well, and one species, *L. polymorpha*, has still to be introduced into cultivation. The remaining three species are relatively attractive, with the fine ferny like foliage of *L. tinctoria* making it a good garden plant. *L. fraseri* is likely to become more popular than *L. myricoides* when it becomes more widely known, as it seems to form a more substantial and attractive shrub or small tree.

**Notes**

* Chile is now divided into 13 administrative Regions, identified by Roman numerals, except for the Metropolitan Region of Santiago which is identified by RM. They originally ranged from Region I in the north at an approximate latitude of 18°S to Region XII in the south, to latitude 53°S. Two additional regions were created in 2006, region XIV between regions XI and X, and region XV at the northern tip of the country. See en.wikipedia.org/wiki/Chile.

** The Botanical Magazine, Bot. Mag,. up to vol. 146 [series 4 v.16] (1920) tab. 8873, is available on the Botanicus website (www.botanicus.org/), listed under Curtis Bot. Mag. The first 14 vols. up to tab. 504 are listed separately under Bot. Mag.

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More details of the Australian species can be found on The Flora of Australia Online website, www.anbg.gov.au, and the Australian Plant Image index, www.anbg,gov.au/photo/ .



# AUSTRALIAN PLANTS ON LINE

Judy Clark

I spend a lot of my online time searching for information about Australian plants. Usually I'm trying to identify a plant and want a picture or a good description, or I'm trying to find out more about where a plant comes from and how to grow it. Some searches turn up very few results, others hundreds or thousands, and some sources are definitely more reliable than others.

One is the Australian National Botanic Gardens website, www.anbg.gov.au/gardens/. Click on "Living Plants" and then "Horticulture" for information about cultivation, and on "Plant Information" to get to their library of photographs, which are unfortunately

not accompanied by descriptions. Another good source is the website of the Australian Native Plant Society (Australia), anpsa.org.au/index.htm; start with the plant guides or the gallery. Just be aware that "frost hardy" refers to tolerance of overnight frost, not prolonged low temperatures..

For photos one of the best sites is the Western Australia online flora at florabase.dpaw.wa.gov.au/, though of course only for plants that grow in WA. The key to Tasmanian vascular plants, www.utas.edu.au/dicotkey/dicotkey/key.htm is pretty good too, though this one is Tasmanian plants only. Both sites also include a short description of each plant. The electronic flora of South Australia, http://www.flora.sa.gov.au/ is not so easy to navigate but its fact sheets include full botanical descriptions.

Another useful site, which I only discovered recently and which is still being developed, is Seeds of South Australia, saseedbank.com.au/. Try it for information about seed biology and germination requirements, SA plants only though. And even though I'll probably never grow any I find tropical rainforest plants fascinating. Search for "online keys to Australian tropical rainforest plants" to get to the site hosted by James Cook University.

# The Australasian Plant Society

## Minutes of the Special General Meeting
## Held at Lullingstone Castle, Eynsford, Kent on 15th November 2014

**Committee Members Present**

Tom Hart Dyke - President
Robbie Blackhall-Miles - Chairman
Ben Ram - Webmaster
Judy Clark - Newsletter Editor
Jeremy Spon - Treasurer/Membership Secretary

Plus Hilary Spon, taking the minutes, and some 20 other current and potential new members – our best ever attendance!

**1. Apologies for absence**

Apologies had been received from Janet Miller (Seed List Manager), George Smith, Jeff Layman, Tony Entwistle, Billy Carruthers, George Smith, Keith Larkin, Christine Yeo, Elizabeth Telford, Patrick Driscall and Peter & Trish Kohn.

**2. Introductions**

After a welcome from Tom, Robbie asked everyone present to explain briefly who they were and what their main interests were.

**3. Committee Reports**

a) Treasurer's Report (Jeremy Spon)

Jeremy reported a continuing healthy financial position, and a total of 132 members who have paid their subscriptions for 2015. The final accounts for 2015 will be

published in the May 2016 edition of Pentachondra. It was agreed that the Society's bank details would be printed on the renewal slip so that members could pay subscriptions by direct BACS payment if they preferred.

b) Newsletter Editor's Report (Judy Clark)

Judy thanked everyone for all the articles sent in. She highlighted the increasing costs of posting copies of Pentachondra abroad; possible subscription increases to cover this were discussed later (see below.)

c) Seed List Manager's Report

Robbie read out a report received from Janet Miller, which confirmed that the seed-list is an important part of the Society, but did highlight the fact that currently very few members donate seed to the list. Various issues concerning the list were discussed in more detail later (see below.)

d) Web-master's Report (Ben Ram)

Ben reported that the website is developing well. He would like to see more details and photos of member's gardens and asked that people should send up to 10 photos. It was agreed that members with their own (garden) websites could have a link to them in exchange for a few photographs.

e) Social Media (Robbie Blackhall-Miles)

Robbie said that other commitments had prevented him from updating our Twitter feed as often as he would like; he was keen to pass the job on to or share it with another member at some point. But he said that social media and the website have been two things that have really started to improve the status of the society, and bring in new members. He suggested setting up a closed Facebook group for the society to act as a forum, and it was agreed he should proceed with this. (The group would need to be closed so that it remains a benefit restricted to Society members.)

**4. Election of Officers**

a) President

The Society has a constitution that states that the President's term runs for 3 years only. Robbie proposed that the constitution be changed so that the President's term was unlimited; this would mean that Tom could continue as President for as long as he was willing to do so. The meeting agreed to this.

b) Current Officers

The Chairman also proposed that the current committee continue in their current posts, and the meeting agreed.

c) Events Organiser

This would be a new post, for someone to act as overall coordinator of events; they would not need to be actively engaged in every event. Gary Firth (with Maria's help) said he was prepared to take this on for 2 to 3 years, and would also cover garden shows. This offer was gratefully accepted.

**5. Events in 2016**

a) Plant Heritage Marquee at Hampton Court.

Although it was felt that there was too little time to prepare for this in 2016, there was considerable support for attempting to put on a display there in 2017, based on National Collections held by APS members.

b) Specialist Societies Show at Wisley

It was agreed to attend this show in 2016, which could serve as a practice run for Hampton Court in 2017.

c) Garden Visits

Tim and Gill Burr offered to host a visit to their garden and new greenhouse, and it was agreed that this should be combined with a visit to Gary Firth's as we missed out on this last year. Gary would organise this. Robbie would co-ordinate a visit to Chelsea Physic Garden, combined with a visit to Mona Abboud's garden in North London. Further visits that would be investigated were one to Ness and to Jeff Irons old garden, one to Cornwall and one to Roscoff.

d) Plant Swaps at Meetings

It was agreed that these had not worked well in recent years, and that it would be better to have members selling plants, with 20% of proceeds being donated to the Society. Nurseries would not need to give a percentage, but would still be encouraged to give a donation.

**7. Minutes of last year's AGM and Special General Meeting**

The minutes of last year's AGM in Edinburgh and the Special General Meeting in November at Lullingstone had been printed in Pentachondra and were taken as read and approved.

**8. Matters Arising**

a) Membership Survey.

Robbie summarised the responses to date. The main reason people gave for joining the APS was Pentachondra, but the seed list was also high on the list. Pentachondra was often read cover to cover, but only a third of members regularly ordered seed, and only a small percentage attended events. Most of those who responded (80%) said they would be happy to remain members if the cost rose from £10 to £15.

b) Subscription Increase.

In view of the responses to the survey, and given the discussions that had taken place in the SGM in 2014, a proposal was put forward to increase the subscription for UK members from £10 to £15, to come into effect in January 2017. This would both cover the Society against increasing printing and postage costs, and also fund expansion. The proposal was unanimously approved. An increase would also be applied to overseas members; the exact amount would be set by the committee based on an analysis of the cost differential for posting Pentachondra abroad.

c) Seed List

A number of issues concerning the seed list were discussed, and the following points were agreed, with action to be taken by the committee to address them:

- The contents of the list need reviewing, and more information could be provided concerning freshness, ease or difficulty of germination, etc;
- More annuals could be included;
- An annual budget of £200 to £250 would be reasonable for Janet to restock, and priorities need to be set for what to buy;
- Linking of articles appearing in Pentachondra, and seeds stocked, would be desirable;
- Members need to be encouraged to both donate seed, and order it;
- The germination guidelines need revising, and to be made available in the members' area of the website.

d) Society Logo/Brand

It was agreed that at a rough cost of £250 to get a graphic designer to produce a range of possible logos this was something the Society could afford. Robbie agreed to speak to some graphic designers and get quotes.

e) New Member Pack

It was agreed this needs improving, and various suggestions were made as to what it should include; the committee would review this over the coming year.

f) Honorary Memberships

It was agreed that although we should maintain the two existing honorary memberships, no more should be awarded without a proposal and vote at an AGM.

**9. Any Other Business**

a) Publicity

Paid-for advertising is not thought to be cost-effective; we will continue with reciprocal arrangements with other societies, like the Hardy Plant Society, but concentrate on a wider dissemination of the membership leaflet, which, after the web-site, is the most effective means of attracting new members.

b) Conclusion

David Ware thanked the Chairman and Committee for all their hard work in making the Society so successful and the President was also thanked for his generosity in hosting the meeting, and organising refreshments. Then everyone gathered in the gatehouse for the formal opening of the new APS library, which Tom had had fitted with bookshelves, and where Brain Halliwell's legacy of books had been installed.


**Illustration acknowledgements**

Judy Clark: page 20 above, page 22, page 31 below, page 32 above right

Gary Dunlop: front cover ,page 19 below, page 21, page 31 above and left, page 32 above left

Gary Firth: page 20, below

Amanda Kershaw: back cover

Peter Kohn: page 9

Clare Reaney: page 10, above

Phemie Rose: page 10, below,

Hebe Society website: (with permission from Stephen Harding): page 19, above

The Botanical Magazine page 32

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**Richea x curtisae**

**In a pot in Amanda Kershaw's and Dennis Blundell's Merseyside garden, originally from Jeff Irons**