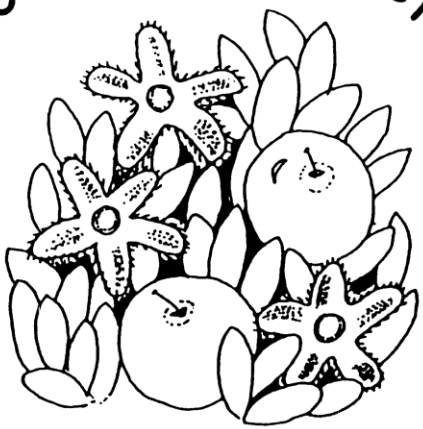
Pentachondra - Newsletter of the Australasian Plant Society



Issue 28 May 2002

AUSTRALASIAN PLANT SOCIETY

Newsletter No. 28
May 2002

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NEWS & INFORMATION CLIPBOARD

AGM 2002

The Society's AGM will be held at Sheffield Botanical Gardens, on Saturday June 22nd. There will be a tour of the gardens and a slide lecture by Marilyn Gray, Curator of Victoria's Karwarra Native Gardens. We shall meet outside the New Centre at 2pm.

There is no parking at the gardens. Visitors must park on Clarkhouse Road or the adjacent ones. The "New Centre" is a wooden building, behind a green gate on the left of the main tarmac walk down from the conservatories. We shall try to get it signed. There is a restaurant and tea room at the Gardens.

If you would like instructions on how to get there please send an sae to Jeff Irons (address on inside of back cover).

Seedlist 2002 is being sent out separately to the newsletter, as Jeff Irons has kindly taken it under his wing to produce and mail. Many thanks to Jeff.

NB. Due to a technical problem, the seedlist may be delayed.

Brian Halliwell has written a small booklet on the Early History of Tasmania. A copy can be obtained from Jeff Irons. Please send a sae.

For Sale

Collection of books; authors include: Farrer, Elliott R C & C, Bean, Heath, Ingwersen, Fish, Coutts, Preston, Lloyd, etc. Also Bull. Alp, Gdn. Soc. Vols 35-70 unbound. List from I. Lansbury, 10 Chilswell Road, Oxford, OX1 4PJ. Phone 01865 721785

THANK YOU

Thank you to all those members, and especially Jeff, who have sent in articles and snippets of news. Apologies for not contacting you on receipt of your article - lack of time again! Deadline for the December 2002 issue is October 16th. Articles can be sent on disk. Acceptable formats are Microsoft Word, RFT and TXT. Please send to Sue Hyams (address on inside of back cover).

EXCHANGE & MART

The following seeds are available from Tony Entwistle. Just send him a stamped addressed envelope with your request.

1. Australian seeds - these were collected opportunistically on my Australian travels and are not suited to Jeff's list. They are a 'pot luck' mixture from all climates - tropical N. Queensland, NSW, Tasmania and WA. Expect some 'strays'.
   A. Eucalyptus
   B. Callistemon/Melaleuca
   C. Leptospermum

2. Non-Australian seeds
   A. Magnolia hypoleuca (obovata) - nice fresh seed harvested Dec '01, kept in fridge.
   B. Cardiocrinun giganteum, Jan '02
   C. Chaenomeles speciosa 'Geisha Girl' - a dwarf cv with pretty double apricot-orange flowers, Dec '01. Does not bear its 'quinces' with me.
   D. Decaisnea fargesii, Nov '01. Blue bean tree.

A QUESTION: What is the best way of ensuring that advanced plants whose rootballs are very tight and twisted survive once planted out?

This question and its answer have been reprinted from Australian Plants, September 1995

"The answer: I would go back one step and say that one should not buy such plants. It has been found repeatedly that young plants catch up with larger plants quickly and often grow faster than them. But if it is necessary to use a plant whose roots have circled round the pot to form a tight ball, drastic action is essential. At the very least, cut deeply down the full height of the rootball in at least four places round its circumference. For larger rootballs there is always the possibility that there is a second circling rootball buried inside the larger one. The only effective way of dealing with this is to cut right through the rootball with an axe, tomahawk, or bush knife so that the rootball is formed into a "butterfly". I prefer this action to an attempt to tease out roots. Butterflying is faster, and appears more effective.

The secret of success when planting out is to use small plants, cut out any circling roots and to use an oversize hole. The hole is part filled with water and some of the soil returned to it. The rootball of the plant is then settled into this slurried soil so that there is intermingling of rootball

and soil. Then the rest of the soil is added and the whole lot firmed down. Some additional water may then be applied. In warm weather further drinks may be given daily to once every several days.

It is important to be sure that the rootball will rewet easily if it dries out. A main cause of deaths is that the plant uses the water in the rootball. If the mix is water repellant, any subsequent watering will not wet it"

Ed. This point has been mentioned in Pentachondra before. If in doubt dunk the whole plant in agricultural/horticultural wetting agent before planting, and always water right up against the plant stems.

"Frost" stats on heaters

By Jeff Layman

For many years I have heated my conservatory or greenhouse with an ordinary domestic fan heater (I know it's probably not to be recommended, but I always have always had an RCD in the circuit fro safety). With the thermostat at its lowest setting (usually at the frost symbol), the heater kept the temperature around 2°C.

Recently, the old fan heater passed on, so I tried one of my much newer spare fan heaters as a replacement. I was annoyed to find that even on its lowest setting, the greenhouse warmed up to around 7°C. The other 2 spare heaters were no better. One resulted in 8°C, the other 10! Looking at the information on the boxes of "proper" greenhouse fan heaters in garden centres, most stated the frost setting to be 5° (if they stated it at all). This is much too high as far as I am concerned. I - and the plants - are quite happy with 1 - 2°C, proving the air is kept moving at all times with another fan. Not only does 7°C result in less resilient plants, but they may keep growing slightly and become etiolated in the poor light. And, of course, the heater is on more, wasting energy and adding to the heating bill.

I looked around for a separate thermostat which would operate around 2°C, but couldn't find one. In the end I bought a fridge thermostat, and adjusted it with its pre-set screw setting to change over the range 0 - 5°C (most fridge stats as purchased are set to operate around the temperature of the freezing compartment - i.e. about -8 to -10°C. This is not at all conducive to plant survival...). The other problem is that fridge stats work in reverse - i.e. the contacts open when the temperature falls, but to turn a fan heater on they need to close. So a relay is needed to reverse the operation; in other words, the normally closed contacts of the relay are held open by the fridge stat until the temperature falls. This is no bad thing in a way, as now we have a failsafe system. If the thermostat or relay fails, the fan heater automatically turns on. Its own thermostat frost setting will prevent the temperature rising above 7°C or so.

Needless to say, all electrics have to be in an insulated box and well earthed. An RCD is essential.

Recommended Seed Suppliers

By Tim Darrington

When in Perth WA in November 1999, I brought seeds from the following two local suppliers. I have since ordered and had seeds sent by post. I recommend these two suppliers to other members, though of course seeds will not have been collected in "favourable conditions" for UK cultivation.

Mr Bill Newman
Australian Wildflower Seeds
PO box 804
Canning Bridge
WA 6153
Western Australia

e-mail wildseed@iinet.net.au
Tel: 00-618-9313-3090
Fax: 00-618-9313-3091

Also sells packets of germination stimulator (smoke granules).

Last year's price A$3-15 per pack (smoke granules same price).
I think I added A$10 for p & p. Access/VISA welcome.

He also supplied me with "Colours of Australia" brochure and sowing guide (free with my order). He offered to try and locate other varieties (I have not tried this, but might interest the society).

****

Natseeds
5 Reynolds Road
Applecross
W.A. 6153
Western Australia

e-mail natseeds@bigpond.com
Tel: 00-618-9364-3351
Fax: 00-618-9364-9179

Last years price A$2-00 per pack
I think I added A$10 for p & p.

Does not take Access/VISA: Best if can find Australian friend who can pay by cheque in Australian dollars.

Cryptandra

A Correction
by Jeff Irons

A few years ago our seed list contained *Cryptandra alpina*. Three members received it in 1997 and another two in 1998.

I too sowed this species. Soon after germination I began to have doubts about it. The only seedling was upright, not prostrate. When the pretty little shrub, just 10cm high, flowered in my scree during February 2002 I was able to key it out as *Cryptandra amara*.

There is little point in writing about such a minority interest plant. However if any members who received seeds would like details, just drop me a line. I have set out the differences between the two species in a simple table.

AUSTRALIAN SPRING 2001

By Tony Entwistle

My wife and I visited Australia for 16 days in October, mainly to visit relatives and friends but with the opportunity to do some "botanising". We started in Sydney and with a visit to Mt. Annan - the Sydney equivalent of Wakehurst to Kew, with 100% Australian plants.

The central terraced area has a general collection, with many Queensland trees and shrubs which seem to be thriving despite the cooler climate. In flower were many Prostantheras, Epacris and "daisies". October is very much Callistemon time, and there was a brilliant display, including many shades of pink I had not seen before: around the 410 hectare park are areas planted entirely with Banksias, *Callistemon*, *Eucalyptus*, *Allocasuarinas*, etc. It was interesting to see at the entrance what must be the most strongly guarded tree in the world - an already sizeable specimen of *Wollemia nobilis* encased in an enormous iron cage!

The Wollemi Pine, a living fossil, was discovered in an isolated gorge in bushland in the Blue Mountains northwest of Sydney as recently as 1994.

These Australian pine trees date back to the age of the dinosaurs. They belong to a new genus of the family Araucariaceae, making them distant relatives of the monkey puzzles of South America and the New Zealand kauri.

Calamus radicalis - Vicious Hairy Mary

An extremely prickly species of palm capable of forming extensive, almost impenetrable thickets in rainforests. The leaf stalks and stems are covered with sharp brown spines upto 5cm long. From the top of the leaf sheath, opposite the stalks, flagella arise. Flagella are slender flexible climbing structures upto 4m in length. With the aid of numerous hooks along their length, they attach themselves to other vegetation.

In contrast, Sydney Botanic Garden is a quiet haven in bustling Sydney and a very cosmopolitan garden, its "middle of the road" climate enabling it to grow a vast range of plants from around the world. There is a fine cactus and succulent garden and tropical house, and there are many mature old native trees eg. *Ficus*, *Flindersia* and *Agathis*.

The northern suburbs of Sydney, where we stayed are a pleasant leafy area, the streets lined with mature trees which seemed mainly Eucalypts, Jacaranda, oaks and planes; in places very English, apart from the flocks of gaudy-coloured parrots.

Then off to north Queensland, at Kewarra, my first taste of the Australian tropics. It was fascinating to explore the rainforests and see so many unfamiliar plants; the differing palms (including the vicious 'Hairy Mary' (*Calamus*), lianes,

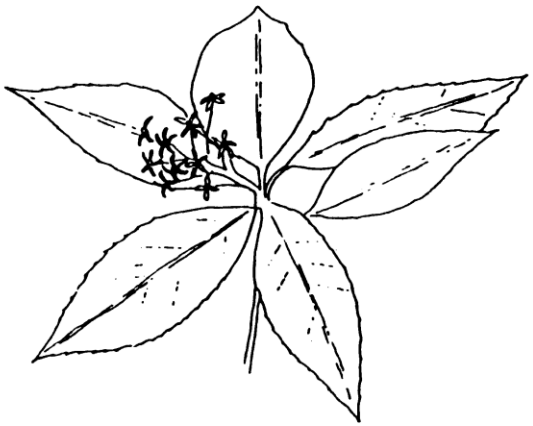


Brachychiton acerifolius Flame Tree

A deciduous tree covered with flame red flowers in spring when leafless. Individual flowers are bell-shaped and waxy, 2-3cm long.

strangler figs; the mangrove swamps; the tops of the trees (many very tall), (the largest being *Agathis australis*) heavily colonised by basket ferns (*Drynaria*) and lower down, like limpets on the trunks, Staghorn ferns (*Platycerium*). Being the end of the dry season, there was not much in flower; the odd burst of scarlet from *Brachychiton acerifolium* - with oddly only one branch of a tee in flower -, and the yellow of *Xanthostemon* and *Abutilon*.

Dislikes: the heat, tiny bright green ants which sting viciously - and when they get up your shorts! - I wonder if "ants in the pants" would be a defence for a charge of indecent exposure; eating crocodile (on all the menus; verdict - like tough salty chicken); a very ripe wild mango dropping from high onto my head, following which I was a bit phobic on Coconut Beach!



Olearia argophylla Musk Daisy Bush

Then off to Tasmania and a welcome drop in temperature. We stayed on the west bank of the beautiful Tamar estuary, in a garden of some 5 acres created over the past twenty years in 80 acres of surrounding bush. The bush consisted of : trees - *Eucalyptus ovata, obliqua* and *amygdaloides, Allocasuarina littoralis* and *Acacia melanoxylon*, with some Dicksonias in a damp gulley. The understorey was *Acacia verticillata* and *Olearia argophylla* - in full flower, but straggly and not very ornamental - and at ground level masses of spiky Lomandras, Gahnias and Luzulas in the wetter parts, and in the clearings

the yellow *Goodenia lanata*, *Patersonia*, the delicate orchid *Caladenia carnea*, *Pterostylis*, and a dwarf *Pultenaea*; lots of *Epacris impressa*, and scrambling around was *Clematis aristata* and *Comesperma volubile*.

The garden itself was by no means an "all-Australian" one; indeed there was a great display of Azaleas, Clematis, Camellias, Fuchsias and Proteas, a large *Ceonothus* in full bloom but there was also a very colourful show of Australian natives - Correas, Grevilleas (*G. victoriae* was especially good), Prostantheras (one dramatically variegated), the white form of *Alyogyne hueglii*, *Thomasias*, *Pimelea ferruginea*, and many Myrtaceae in white, pink and red - *Leptospermum*, *Callistemon*, *Bauera*, *Baeckia*, *Melaleuca*, *Hypocalymma*, *Calytrix* and *Thryptomene*. The hedge along the property was a mixture of Eucalypts, Hakeas (of tree size - I had never seen any so big before), Allocasuarinas and Acacias, most of which were over but *A. mearnsii* and *iteaphylla* were in full glory.

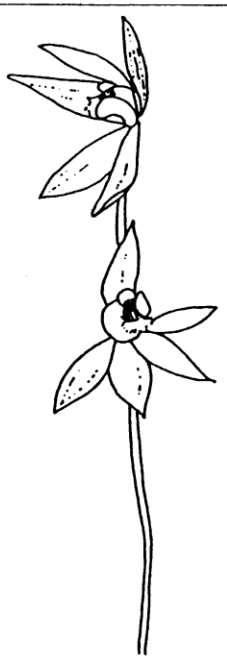


Pimelea ferruginea

Dense terminal globular heads of pink flowers adorn this erect shrub. The individual flowers of the Pink Rice Flower are tubular with four spreading lobes with two protruding stamens.

The main problem in the garden was possums, and the trees had metal collars to prevent them climbing and defoliating; needless to say the fruit and vegetable garden was completely encaged.

We also visited an enchanting native garden on the north coast at Penguin (belonging to a friend of Jeff), extremely steep but packed with plants; also a native plant nursery on the estuary which had an enticing stock of Tasmanian natives such as *Richea*, *Dracophyllum* etc.



Caladenia carnea

The flowers of this orchid are white to pink, solitary or in terminal racemes of 2-6 blooms.

Then on to WA, staying north of Perth at Wanneroo, at the home of the current president of the WA Wildflower Society (APS). A full day was spent at Kings Park, my favourite botanic garden after Kirstenbosch. In the morning I was privileged to be taken around the propagating department and the endangered garden. They



Clematis aristata

This Australian clematis is covered in white star-like flowers, 3-5cm across, with 4 narrow-pointed lobes and many stamens, arranged in panicles.

raise their cuttings under glass, with mist and gentle bottom heat, putting cuttings singly in small peat pots, in a compost of grit, peat and perlite, and treating with indole and naphtha acetic acid (there does not seem to be, as yet, any "anti-peat" culture in Australia). I was also able to see the range of new Lechenaultia hybrids in every conceivable colour and bicolour.

Then to explore the main garden itself. In the more formal part, there was a bed of orange *Anigozanthos* 'Kings Park Federation Flame' underplanted with the deep blue form of *Lechenaultia biloba* - a stunning sight.

Most Banksias were over but the lovely orange *B. ashbyi* was in bloom, and there were colourful displays of Dampieras, Pileanthus and Darwinias.

In the evening I was back to attend a meeting of the WAWFS management meeting. One interesting matter raised was about sending seed outside Australia, ie. from their Eastern Hills seed farm. It was clear that some members disapproved of the 'loss of genetic material' from their country. I could not see the logic of this, and said my piece. I would have thought that a global distribution would be a good insurance policy against a major climatic disaster (much as is the Wakehurst seedbank). It was decided to continue supplying seeds to APS members of 'long-standing'.

I also visited the huge native plant Lullfitz nursery and was shown around by George Lullfitz himself. The prices were extraordinarily reasonable - around 80p for a tube (a small cylindrical plastic pot) and even larger small grafted plants cost only £3.

I also explored an isolated bush site in the north of the Perth suburbia which my host had been cataloguing as part of the BushForever project. In quite a small area over 80 spp had been found. There had been a fire fairly recently so there was a lot of regeneration. Trees were

Eucalyptus marginata, todtiana, Allocasuarina fraseriana and *Nuytsia floribunda*. Undershrubs were *Banksia ilicifolia, menziesii* and *attenuata* and a variety of other Proteaceae - *Dryandra nivea, Petrophile linearis, Stirlingia latifolia* etc and many 'peas' (*Jacksonia, Bossiaea, Daviesia); Pimelea sulphurea* and Myrtaceae such as *Eremaea, Hypocalymnia; Xanthorrhoea preisii* and *Anigozanthos manglesii* and *humilis*. At groundlevel in flower were Calandrinias, Lobelias, Wahlenbergias, 5 *Stylidium* spp and 3 *Conostylis*, and many 'daisies'. Most lovely of all was the native violet, *Hybanthus calycinus*.

The only 'weed' was a prolific spread of the pretty pink South African *Gladiolus caryophyllus*.

I also had a trip to the north, exploring the area between Toodyay and New Norcia, and the Rica Erickson reserve. This is very much *Lechenaultia biloba* country, and we saw the white-centred form in several places.



Petrophile linearis

This shrubby member of the Proteaceae family can grow upto 60cm high. The flowers are pink or mauve with a prominent orange to red style.

There were sheets of colour of the yellow *Glischrocaryon flavescens* and the purple *Keraudrenia* 'fire-bush'. Other showy flowers were the white plumes of *Grevillea leucopteris*, and *Verticordia chrysantha*.

In the reserve (Wandoo) were a lot of *Isopogon dubius*, prickly Dryandras, many pretty Stylidiums and a deep orange Sundew, *Drosera barbigera*.

I brought back with me a copy of the new Western Australian Flora (Paczkowska & Chapman) which cost A$39 (but A$69 if you order it from here, with p&p - quite a difference!) This is a replacement for Beard's Descriptive Catalogue of WA plants, published in 1965. This was of pocket size, weighed 300g and listed 5800 spp. The new book weighs 2kg and lists nearly 12000 spp - such is the advance of botanical knowledge in the past 40 years; it is not a picture book, simply a brief descriptive list of species and their locations.

Another 2 Years Of Daisies

By Einion Hughes

Some time ago (*Pentachondra* 25) I mentioned my interest in the genus *Olearia*. Every year brings changes to a garden, so my collection of these plants has changed somewhat in the meantime. These are some of the delights and disappointments they've given me during the last two years.

Forget It

Having extolled the virtues of the shrubby *Olearia argophylla*, it lost no time in dying during the winter of 00/01, a couple of nights at -7°C combined with an unusually wet winter proving too much for it. I replaced it with *Rhododendron maddenii*, which I hope will prove rather hardier.

When visiting my garden a few years ago, Jeff Irons pointed out that my small, recently acquired plant of *Olearia* 'Henry Travers' was quite unsuited to its position in a sharply drained bed in full sun. He recommended that I move it to a moister position as soon as possible, otherwise sooner or later The Dreaded Lurgy (aka Phytophthera) would set in, the entire plant would turn a hideous shade of brown, and that would be that. I made a mental note to move it at the first opportunity, but this was a gardening chore that I somehow never got round to; you know how it is. As a result, The Dreaded Lurgy set in, the entire plant turned a hideous shade...etc, etc. The fact that its demise had been accurately predicted only served to make it all the more irritating.

The Jury's Still Out

Another culprit that came very close to dying in the early spring was *Olearia* 'Zennorensis'. I watched with horrified fascination as its four healthy branches took it in turn to die, one at a time; a beautifully choreographed act that brought back childhood memories of *Sunday Night at the London Palladium*. Luckily, the fourth branch survived, and this has subsequently produced new growth. I love the sharply toothed foliage of this hybrid, so when I saw some good-sized specimens for sale in a local nursery during the summer, I bought one as insurance. This had two sizeable flower heads on it, and I hope to see them produced in greater numbers in the future.

One drawback with collecting members of a particular genus is that eventually some of the less inspiring species are likely to make an appearance: cue *Olearia odorata*. This is the only deciduous olearia in my garden, although I assume that there may well be others. In summer it is clothed (rather sparsely) with undistinguished very small leaves. It has yet to produce any flowers. I have to remind myself that it's actually there in the ground whenever I'm passing, otherwise I overlook it completely. Many gardeners regard the

widely planted *Olearia x haastii* as being rather boring, but it's wildly charismatic compared to this terminally and spitefully dull little shrub. If it fails to flower next season (fingers crossed!) then I shall pot it up and take it along to a plant sale, where I shall endeavour to spin-doctor it into some other, unsuspecting, gardener's ownership: "it's rare" should do the trick.



Olearia phlogopappa

Olearia frostii has surprised me considerably by its very survival. It arrived as a very small plant, a gift from a kind friend; it's not that much bigger now. It was clearly unhappy last winter, but it pulled through and even managed to produce a solitary flower this summer, quite a large flower for the genus. I believe that this species benefits from being pruned after it has flowered, but not wishing to kill the plant altogether, I desisted. It may be that, in a few years, when it has put on a lot more growth, it will prove to be one of the great floral showstoppers in my garden. Well, maybe.

Paying the Rent

Reading this far may have convinced readers to stay clear of the genus Olearia and all its works, so I'll now turn to those that have performed as they should.

Olearia phlogopappa flowered profusely again this year, at the two-foot level, as did the closely related *Olearia lirata*, which is now a seven-footer. I know that both these plants should have their flowered wood removed to promote denser and tidier growth, but in the case of the former it's still a very small plant and the latter, despite its ever-increasing height, is still well clothed with foliage almost to the ground. *Olearia floribunda* flowered for the second year, and a charming sight it was. This olearia's branches are densely clothed with tiny dark green leaves, and although the flowers are very small, they are very showy, being both very white and very profuse. The visual effect is of a small dark green conifer liberally dusted with icing sugar; appealing to me, but perhaps not to everyone. 2001 was the year that my *Olearia nummulariifolia* finally produced its first flowers. I nearly missed the show, since the neighbouring *Lathyrus rotundifolius* had flung its stems over all its neighbours, and who's going to notice small 3-petalled white flowers when they're hiding under a far more alluring display of red pea flowers? I've since bought some metal supports for this climber and a couple of its equally strong-growing relatives, so I hope all will go well for both plants in 2002.

Olearia cheesemanii produced its usual spectacular floral display, dark glasses being the order of the day when admiring this shrub in full bloom. In this instance I did cut out all the flowered wood after the flowers had faded, and although the plant seemed drastically reduced as a result, it is now quite a lot larger than it was 6 months ago. *Olearia erubescens* also flowered; I can't make up my mind about this one - the flower heads are very open, unlike the dense heads produced by most species, something I consider a pleasant change. On the other hand, the plant's growth isn't really as strong or as dense as I would like; its two main branches are always flopping about onto their long-suffering neighbours. Perhaps I should prune it and see what happens?

Other species that have grown well here this year but not flowered include *Olearia canescens*, one of my favourites in the foliage stakes. It's now several feet across, rather wider than high, and can't be that far off flowering, surely? In the meantime, it makes a sizeable and tasteful grey statement in the front garden. An even better foliage plant is *Olearia paniculata*, whose wavy-edged apple green leaves remind gardeners of pittosporums, or at least those gardeners whose knowledge of pittosporums is restricted to *P.tenuifolium*. Having produced a few flowers in 2000, it didn't bother this year, but as I grow it primarily for its foliage, I've lost no sleep over it. This plant grows at a steady but slow pace, unlike another relative close by, *Olearia virgata var. lineata*, which has more than doubled in size in the last year. This is now over six feet high, and although it's quite close to my house it causes no problems with shade, since it has such open, slender growth. I was interested to see this daisy bush flourishing in the garden at Coton Manor in Northamptonshire last year, which suggests considerable hardiness.

Thomas Frederick Cheeseman
1846-1923

This Englishman botanised widely in both the North and South Islands as well as some of the offshore islands, including the Three Kings and the Kermadec Group. Plants named in his honour include *Parahebe cheesemanii*, *Coprosma cheesemanii*, *Olearia cheesemanii* as well as the genus *Cheesemania*.

Pleased to Meet You

Several other olearias have arrived here during 2001. The same nursery where I found my spare 'Zennorensis' also produced, on the same day, *Olearia* 'Waikariensis'. From what I've read about this hybrid, I can expect it to be primarily a flowering plant; its greyish foliage is slightly larger and slightly more interesting to my eye than that of *O.x haastii;* pleasant enough but scarcely possessing star quality. It seems to have settled in happily enough into its new home, and I now await its eventual flowering with interest.

The other four new olearias here all came from a garden that I visited for the first, but not the last, time in 2001; Linn Botanic Garden, on the shores of Loch Long in Argyll. Tim

Longville, who had already visited it the previous year, alerted me to the attractions of this garden. I can recommend it to readers of *Pentachondra*, not only for its romantic and evocative atmosphere, reminiscent of temperate rainforests, but also for the incredible range of plants grown there by Jim and Jamie Taggart, father and son. In addition to numerous plants from Australia and New Zealand, there are many rhododendrons (100's), magnolias, bamboos, tree peonies, bulbs, primulas, meconopsis and so forth. Well worth a visit!

Olearia moschata was a plant that I spotted in the sales area, its pale grey leaves proving to be a stand out. Jane Taylor, who is, or at least was, an admirer of this genus, only mentions it in passing. Neither does W. Arnold-Forster go into rhapsodies of praise, although he does say that it's very free flowering once established. This is one of my favourite foliage plants; the slightly wavy thick-textured narrow leaves are about an inch in length and produced quite densely. I have it planted in front of and as a contrast to the taller *O. paniculata*.

I have a photograph taken in the lower part of Linn of a particularly fine combination of *Olearia arborescens* planted near to a pink-flowered form of the highly scented *Rhododendron fortunei*. *O. arborescens* is sufficiently at home this far north to self-sow with enthusiasm. There was none of it in the plant sales, so Jamie very obligingly clambered up the cliff that divides the garden, and dug up a couple of self-sown seedlings for me; that's the sort of gardeners the Taggarts are. I potted up the seedlings on my return home, and they have established themselves nicely. I shall plant them out this coming spring, in the hope that they prove to be hardier than the similar *O. argophylla*.

Another species, not in the sales area but conjured up once my interest in olearias became apparent, was a small rooted cutting of *Olearia lacunosa*. Arnold-Forster recommends that this should be planted in damp soil, suggesting that known failures with it might have been due to drought. I can only recall seeing two established plants of this shrub: a friend further down the coast from me has it planted about halfway up a fairly steep slope, while the fine specimen at Linn is growing at the top of the well-nigh vertical cliff. In the case of the former, drainage must be pretty sharp; in the case of the latter, virtually instantaneous. This quandary means that my plant is still in the pot it came in, as I wonder which situation would suit it best. The plant itself is still only some 3" tall, but those dark green lance-shaped leaves are already a good 5" in length. I really must get it into the ground, soon. *

My final acquisition on that particular day last May was a small seedling of *Olearia* 'Zennorensis'. This hybrid will not come true from seed, but it will cross with other species, in this instance, *Olearia macrodonta*. The resulting mongrel is intermediate between the two parents, the leaves being shorter and broader than those of *O.* 'Zennorensis', but narrower and more toothed than those of *O.macrodonta*. Still a young plant, it already

shows considerable promise as a fine foliage specimen in future years. It has just that bit more 'class' (an almost indefinable virtue in plants - discuss...) than *O.macrodonta* itself, which is probably the second most commonly planted olearia in this part of Wales, & possibly in the rest of the UK.

I have planted members of numerous genera in this garden over the years, and I would be hard-pressed to name another genus that has provided me with a greater variety of growth habit and foliage, as well as an almost embarrassing eagerness to flower as profusely as possible. I'm certain that the years ahead will have even more olearias clamouring for space here, space that I will be more than willing to provide.

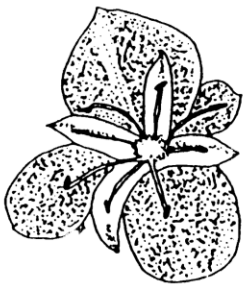
* Subsequent to completing this article, I have discussed *O.lacunosa's* cultural requirements with Jeff Irons, who has pointed out that not only does the west of Scotland have a high rainfall, but also that the atmospheric moisture level is usually much higher than in many other parts of Britain.

End of Year Report
Dennis Rowlinson, Stockport, Cheshire

This is written as the garden is covered by the first real frost of the season and quite a few plants are still flowering away out there in the cold.

Prostanthera cuneata you'd expect to have a few flowers on, but the one in the back garden is covered, and shows well with the red flowers of *Fuchsia thymifolia* in front of it.

Clianthus puniceus keeps trying, and produces a few flowers as soon as the weather warms slightly. I hope it will do last year's trick and keep flowering through most of the winter.



Correa alba

Correa alba is still in flower after about 3 months - though the clone has quite small flowers it makes up for it by having so many. I'm still surprised it manages outside in the garden after seeing it on a sunny coast in Victoria.

Correa 'Mannii', and *C.* 'Marion's Marvel' are in pots and along with *Grevillea alpina* are flowering madly on a bench outside. *G. alpina* has managed to flower most months of the year for some reason.

Kunzea ericoides flowered for the second year and had a few more flowers. The plant is now 2m high and makes a lovely willowy shrub.

Kunzea ambigua is still sulking and I can only hope for flowers next year. But then it's only 1m high and may need a bit more height.

Like Hugh Barr from Penrith, this year was the first time my Coprosmas have set drupes. So after so many years both *C.* 'Jewel' and *C. petriei* performed well. This was after 15 years I think, and I think you would also have a wry smile.

Both *Billardiera longiflora* set loads of fruit and even after sending away seed there is quite a lot of colour on the plants.

Billardiera longiflora - commonly known as the Purple Apple Berry, this twining shrub has wiry stems, greenish-yellow flowers, sometimes tinged purple followed by purple ovoid berries.



Billardiera longflora

Some of the Clematis flowered well - *C. australis* (m), 'Lunar Lass', 'Joe', *afoliata* (m) and *hookeriana* showed, but *C. foetida, fosteriana, gentianoides, paniculata* and *pubescens* were too shy and retiring. Until they flower their sex is a secret, so I won't know if my *C. afoliata* will have a friend.

I am hoping that the seedlings of *C.* 'Early Sensation' will brighten the fences - has anyone grown this one, if you have could you let me know how high it grows and how hardy it is. The only one I've seen is at a show and that might have been trained to fit a certain position.

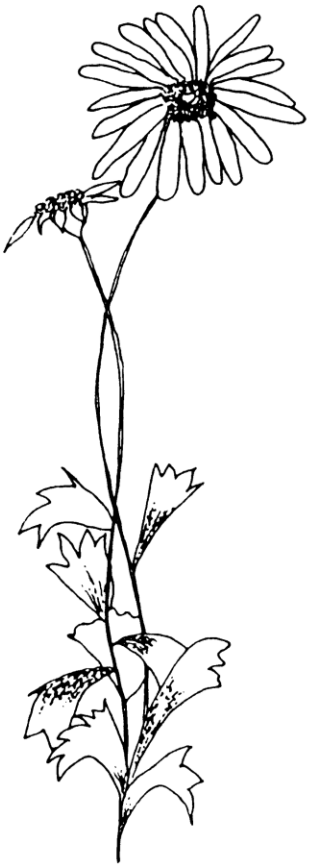
I also have a small seedling of *C.* 'Gold Star', which I was informed was another Antipodean hybrid - does anyone know about this one?

Lastly, I have an *Acacia brachybotrya* in a large pot that looks as though it might even flower this year. So along with me, would you cross your fingers and hope it does, as I have never had an Acacia in flower.

If anyone would like an *Acacia brachybotrya* seedling, drop me a line and I'll send one!

Ed - I contacted Bransford Nurseries from where I buy *Clematis* 'Early Sensation' for the garden centre. They e-mailed me the following information:

'*Clematis* 'Early Sensation' is an evergreen hybrid originating in New Zealand. These varieties vary in how hardy they are a great deal from one variety to the next. We have grown 'Early Sensation' outside through last winter with no problems. We experienced -13 degrees centigrade for one night during a week of -5 to -10°C temperatures. Our plant is in well drained soil which is an important factor for successful over wintering. I hope this is of help, as with many new introductions to the UK market our information is limited to 1-3 years trialing.'



Calotis cuneifolia

* * * * *

Dennis also provides some thoughts on *Calotis cuneifolia*, the Blue Burr Daisy.

I think the answer to the complaint that *Calotis cuneifolia* flowers sparsely, is to grow quite a few plants in a pot with another plant as a focal point.

I planted 10 plants around a cutting of *Melaleuca densa* in a large pot and let it happen. The Melaleuca supported the Calotis and the flowers stood out against the dark green. It was a great success! It has only just finished flowering. In comparison, the ones in the garden still looked scrubby, so I will follow the plan next year. It makes collecting the seed easier as well.

RACOSPERMA

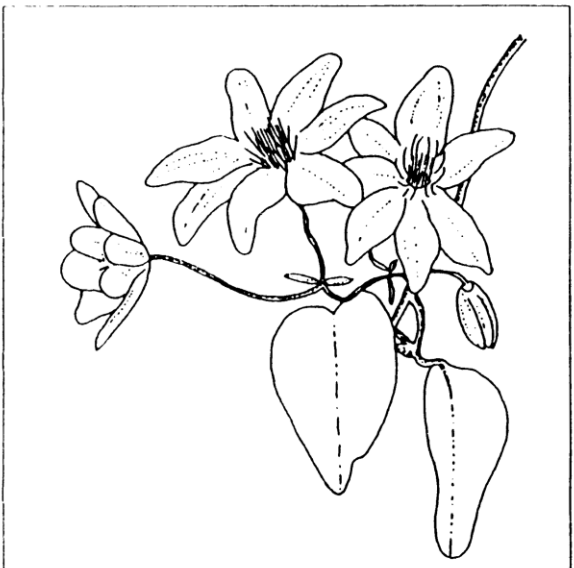
Members may wonder why Australian acacias have been transferred to the new genus *Racosperma*. The reason is that on a world scale they do not fit comfortably in the genus. Two hundred and fifty years ago only a few *Acacia* were known, and relationships that are obvious today could not be seen. The 'type specimen' is an African species, and since there are many similar species it is not practical to leave the Australian ones as *Acacia* and change all the others.

Beauhill – an update

By Jeff Irons

Tim Longville's description of Hugh Barr's garden, near Penrith, aroused a great deal of interest, and generated several queries. Tim has asked me to deal with them.

Like most of us, Hugh Barr calls his plants by the name under which they were obtained. In the course of time some of them have changed. Rather than simply giving the replacement names, I have chosen to give some of the background to the changes. Inevitably this will involve a fair amount of technical information, so if you are not that way inclined, give the rest of this article a miss.



Clematis paniculata

Firstly, both Tim and Hugh will be pleased to know that *Clematis paniculata* is alive and well, its name has not been changed to *C. indivisa*. On the other hand *C. petriei* is nothing more than a selection of *C. forsteri*.

Tim asked about the present taxonomic status of the shrub that Hugh calls *Pachystegia rufa* and the Plant Finder calls *Olearia insignis*. To do that we have to go back to 1855, when Hooker described plant material collected by D. Monro on the banks of the Waihopai River. This is where the first bit of confusion creeps in. Monro is often credited with the discovery of the plant, but in 1899 Hooker gave the honour to Captain D. Rough. Hooker placed the plant in the genus *Olearia*, calling it *O. insignis*. At that time he noted that it had several features different from those of other olearias, and felt that it should almost certainly be in a separate genus. In 1925 Cheeseman put this *Olearia* into the new genus *Pachystegia*. The most recent authoritative literature available follows Cheeseman's naming, and recognises three species: *Pachystegia insignis*, *P. minor* and *P. rufa*. It states also that there are two other species, which are (at this time) undescribed. No botanist in New Zealand has any intention of turning back the clock, and re-instating *Olearia* for these plants. The International Plant Names Index uses *Pachystegia* not *Olearia*.

At least six hybrids between species of *Pachystegia* are known to occur in New Zealand. All of them, both species and hybrids, are found in the dry north east of the South Island, and therein lies the cause of the difficulty with their cultivation in Britain. The problem arises from our wet winters. I have no knowledge of how they overwinter in the eastern part of Britain, but believe that they might grow well in such areas as Surrey's Greensand belt, and Sue Hyams' Hambledon Hills. They would probably grow well in those parts of western Britain that have sandy soil. Several years ago *P. rufa* grew outside the house at Rosemoor, obviously quite content with its situation. In my garden it is best grown as a pot plant that is overwintered under cover, and stood outside in the summer.

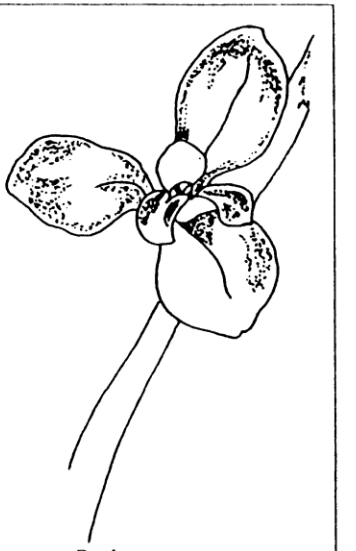
Tim comments that the Plant Finder wants us to call *Phormium tenax* 'Veitchii' by the name 'Veitchianum'. I've never heard of 'Veitchii', but the RNZIH publication 'Checklist of Phormium Cultivars' states that *Phormium tenax* 'Veitchianum' was described in 1886. The only synonym it gives is *Phormium* 'Veitchianum'. Hugh's plant is clearly another victim of 'nurseryman's confusion'.

There used to be a plant called *Coprosma brunnea*. Botanical revision has made it no more than a variant of B. *acerosa*. The difference from *acerosa* is so insignificant that it does not even merit the epithet forma. This is another change that has not yet found its way into the Plant Finder. Newcomers to this genus need to know that it has male and female flowers on different plants. So, although it is grown for the attractive fruits, you will not get them unless you have at least one plant of each sex. Ideally you should choose plants at the nursery when they are in flower. It enables you to know that the flowering times of the sexes overlap. When growing your own plants from seed, you will find that most are female. To be reasonably sure of getting a male, you need to grow on at least a dozen seedlings.

Astelia nivicola 'Red Gem' also caused some comment. As well as the nurseries listed by Tim, this plant can be bought from an APS member, Trevena Cross Nursery. My own specimen looked very fine at the start of the 2000-2001 winter. After it, the plant was very bedraggled, half of the leaves had rotted away, and the red colour had almost disappeared. It did not recover during the summer. At the AGM I noticed that Doug Smith's plant was no better than my own. Perhaps local conditions have a big effect on its appearance. In my garden *Fascicularia bicolor* is much better than this *Astelia*.

Diplarrena is the correct spelling for the species that The Plant Finder and Tim call *Diplarrhena*. The Rules of Botanical Nomenclature state clearly that the earliest name has precedence. In this instance Labillardière's 1799 spelling should be used, not Robert Brown's 1810 spelling. However, I think it is unlikely that Hugh Barr is actually growing *D. moraea*. The reason is that although the name *D. latifolia* dates back to 1873, at the time when our nurserymen's stock was introduced (probably by Comber), there was only one species. *Latifolia* was nothing more than a high level form of *moraea*. I recall that in 1966 what we now know as *D. latifolia* was one of the plants in the walled garden behind Alan Bloom's house. It was labelled *D. moraea*. Today's botanists recognise both species. There is an overlap in their leaf sizes, and the only reliable time to separate them is when they are in flower. The petals (inner segments) of *moraea* have yellow at their outer margins and purple in their middles. Those of *latifolia* have purple

markings at their edges and yellow ones in the middle. Some plants have petals that are almost entirely purple. The large outer segments of *Diplarrena* flowers are sepals. Unfortunately book illustrations are not reliable as a means of separating the two species. As an example, on giving me a copy of her book "Australian Plants for the Garden" Gwen Elliot commented that the only wrongly identified photograph is the one captioned *Diplarrena moraea*. It is actually of a rather nice *D. latifolia*. *D. moraea* has flowers that are rather small for the height of their stalks, so is not as good a garden plant as *D. latifolia*. It is also less cold tolerant than *D. latifolia*. Incidentally I find that the very small forms of *D. latifolia* need moist soil that is rich in organic matter. Unlike the other plants of this species, they do not fare well in most of my garden. They flourish only in the bed where my *Ericaceae*, *Primulaceae*, and *Meconopsis* grow.



Diplarrena moraea

The Tasmanian *Dracophyllum milliganii* is another unknowingly mis-named plant. It used to be that this species had both an arborescent and a sessile form. However until it gets a species name, the form with a trunk is now called *Dracophyllum* "Southwest". It grew in my garden for some years, but died at the end of one summer. Graham Hutchins also grew it as a pot specimen. There are several precedents for this kind of helpful naming treatment by botanists. To give only two examples, *Kunzea* 'Badja Carpet' is actually a species that has been waiting over 20 years for a name. 'Formosa' has been without a genus for over 10 years. It used to sit uneasily in *Parahebe* as *P. formosa*. The cushion plant *D. minimum* grows well in Wirral, but because of its small stature is treated as a pot specimen.

The taxonomically inclined may like to know that this genus, *Dracophyllum*, will be affected by botanical revision. The principal difference between its family, *Epacridaceae*, and the heather family is in the way most (but not all) epacrids shed pollen from their anthers. Recent studies indicate that the *Epacridaceae*, should be re-classified as a sub-family of the *Ericaceae*. To keep it as a separate family would require *Ericaceae* to be broken up into a number of small families. This would have the effect of obscuring their affinities. When revision is complete *Epacridaceae* will become the sub-family *Epacridoideae* within the family *Ericaceae*. Already the tribe *Richeoideae* of the *Epacridaceae* has become the tribe *Richeae*. It is the tribe that includes *Dracophyllum*.

Tim's description of *Celmisia asteliifolia* as a 'handsome' plant carries the implication that it is quite large. In turn that suggests that it is not *asteliifolia* but is, in fact, something completely different. Gary Dunlop and I have had long discussions about the real names of plants currently grown in Britain as supposed Australian species. We have had correspondence with the *Celmisia* botanist Max Gray. Condensing all that we have learnt is not easy, but what follows is an attempt at summarising the situation.

The name *C. asteliifolia* used to include plants from both mainland Australia and Tasmania., In British gardening it was often used interchangeably with *C. longifolia.* This problem was referred to in the APS Newsletter for April 1990. At that time we knew that a botanical revision was 'on the way'. Although the proposed names were known, they could not be used until they were 'validly published'. The revision was published in 1999. It has made *C. asteliifolia* a Tasmanian endemic. Unfortunately although the revision papers give descriptions for the new species, there are no new descriptions for *C. asteliifolia* and *C. longifolia.* Neither is there a key to all the Australian species. That will come when the volume of the Flora of Australia that includes the daisy family is published. In order to identify a species one needs to have the whole plant, right down to the bases of the leaves. A single leaf or flower is not enough. Unless he knows the origin of his plant I believe it probable that Hugh's specimen is not *asteliifolia.*. Assuming that it is Australian, and not from New Zealand or is a hybrid, there are several possible species. If Hugh's plant forms a clump, with offsets arising from a central crown, that proves that it is not *asteliifolia.* The true species is small and spreads by stolons, so that a single plant can cover quite a large area. Since celmisias are self-incompatible (i.e. you need two or more different plants to get seed), such a colony will set seed only if there is an adjacent genetically different colony; or unless it hybridizes with an adjacent species.

It is easy to get muddled up over the origin of plants from the other side of the world, but I have to point out that *Aciphylla dieffenbachia* is not a Tasmanian species, but comes from the Chatham Isles, which are part of New Zealand. Both Tasmanians and New Zealanders are very proud of their islands. Some of them get quite upset when THEIR things are attributed to somewhere else. As a aside in the same vein, in Issue 26, Doug Smith wrote that he had discovered that *Hibiscus trionum* is a New Zealand native plant. It is not. It is an Australian plant that has become a naturalised weed in New Zealand.

Tim implied that the delightful *Libertia caerulescens* is antipodean. That was one of his rare lapses. It is, as he knows well, South American. Early summer is the season for its pale blue flowers, and the species is just as easy to grow as its white flowered Australian and New Zealand relatives.

Is there a moral to all this? If there is one, it is that people make names, and that the plants are quite oblivious to all of our goings on. They just get on with growing and trying to reproduce themselves. Some of them like Beauhill very much.

CONGRATULATIONS!!!

Those members who attended the 1999 AGM at Ness which was addressed by Rodger & Gwen Elliot, will remember that the main reason Rodger was in Britain was to receive the Gold Veitch Memorial Medal awarded by the RHS. Last year both Rodger & Gwen were included in the Queen's Birthday Honours List and each awarded a Member of the Order of Australia for service to horticulture, particularly in the area of Australian Plants.

Paradise unfulfilled?

By Jeff Layman

Last year, I visited Cornwall during the last week in June and the first week on July. This was my first visit for 20 years, and the previous visit just predated my interested in Australian plants. I was looking forward to seeing the gardens there, and also visiting the Eden Project and the Tresco Abbey Gardens on the Isles of Scilly.

Tresco and Eden fully lived up to my expectations, but at the risk of being controversial, with one or two exceptions I was more than a little disappointed with the half dozen or so Cornish gardens I visited (in the guide to Cornish gardens and/or the Yellow Book). I should confess at the outset that I forgot to take the APS list of member's gardens. But I can say that on checking following my return, none of the gardens visited was on the member's list.

So why the disappointment? I suppose the reason is that I expected them to be a lot more adventurous. Tree ferns, Chusan palms, and Agapanthus can be seen almost anywhere now. They may grow larger and in greater profusion in Cornwall, but where were the more tender plants? Surely the south-west of Cornwall doesn't have a climate that much different from the Scillies? Staying in a hotel on the coast just on the eastern fringe of Marazion, I asked the hotel owner when the last frost was that he could remember. He replied that he thought it was in 1987! Now that may have been an exaggeration, or just poor memory, but I do not believe it was too far out. If that is the case, why aren't the gardens growing - or trying to grow - all the tender plants that grow on Tresco? Of course, a few won't survive, but many will. Just going round the nurseries there had my mouth watering! I have no doubt that many of the plants for sale are kept under glass or polytunnels in winter as an insurance policy, rather than as a reflection of their true local hardiness. These nurseries are in business, and can't afford to see their stock decimated by a rogue frost. But there is no reason why the gardens there can't try a few "tender" plants to see what happens, rather than grow the same old ones time after time. I was lucky enough to be there the day that Lower Kenneggy Nurseries (an APS member) had their plant sale. There was a great selection of interesting plants such as Callistemons, Melaleucas, Kunzeas, and Eucalyptus at silly prices (£1 to £1.50 each!). I crammed as many into my car as would fit (and my wife would allow...) to try some outdoors here in Horsham. Why not at that price?

And if I am willing to try, why not all the Cornish gardens? But then I guess that some must be, or else why would the nurseries be selling these plants? Yes, I know it isn't just the temperature, but the wind and salt that have to be contended with. But once again, if they can do it on Tresco, where there is an even greater problem with wind and salt, why not the mainland?

Well, they can. There were a number of large exotic plants in a public garden in Falmouth. They weren't labelled, so I am not sure what they were. The only thing I could identify for certain was a large *Melianthus major*. Not unusual in itself, but I do not think that I have ever seen one flowering before, and certainly not outside.



Hymenosporum flavum

But there was one amazing garden I visited, which as far as I am concerned is one of the finest in England. It was all the more amazing as the day I went the weather was awful. The cloud layer was almost at ground level, and heavy mist alternated with the heavy rain. It was so gloomy as to make photography impossible. Yet Pine Lodge (see www.pine-lodge.co.uk), near St Austell (& only a few km from the Eden Project) was amazing. This garden has 6000 plants in its 30 acres, all labelled, and has the national collection of Grevilleas (so why aren't they members of the APS?). There are so many plants to see, all in beautifully landscaped gardens, together with a new arboretum. One plant in particular caught my eye, and my nose as I got within a metre or so. It was about 2.5 metres tall, and growing a few metres from the house. The yellow flowers puzzled me, as it smelt just like Frangipani. But the true Frangipani (*Plumeria spp)* has somewhat larger usually red to rose, or white flowers. I should have known what it was, despite never having seen one, and had to ask the owner. She told me that it was Australian Frangipani, and then the penny dropped - *Hymenosporum flavum*! I asked her how long it had been there, and she said 6 years. 6 years! This is a zone 9 plant from east coast subtropical rain forests and PNG. Yet here it was growing - and surviving well - in deepest Cornwall. I have no doubt that had the weather been better, and I could have spent more time exploring, I would have found other gems. Do not miss Pine Lodge if you are going to Cornwall - put it top of your list.

It also has a very interesting sales area, with an absolutely extraordinary range of tender plants. So if Pine Lodge can do it, why not the other gardens?

By the way, as Tony Entwistle wrote in the last Pentachondra, do go to the Eden Project. It really is a unique place. And, of course, visit the Tresco Abbey Gardens. If you can't stand the 2.5 hour sea crossing, take the 20 minute helicopter flight. The Proteaceae grow as well as in Western Australia or South Africa, and there are so many other plants to see. If you take the first helicopter flight out, and last one back, you should have enough time to see it all in some detail.

'Tresco is one of the Isles of Scilly, an archipelago of islands, of which five are inhabited : St. Mary's, Tresco, St. Martin's, Bryher and St. Agnes. The islands lie 30 miles south west of the Cornish mainland. The Abbey Gardens of Tresco are warmed by the Gulf Stream which brings warm air from South America. This results in a mild climate, the mean monthly temperature ranging from 7°C to 17°C. Severe winters are uncommon, although there have been several disasters during the past 15 years.

In the April 1993 issue of the newsletter, there was a report written by Tony Entwistle about his visit to Tresco in the autumn of 1992. He wrote that the islands had suffered severe gales over the past five years, which blew down most of the shelterbelt of Pines on the Atlantic side exposing the southern end of the garden. This, in turn, resulted in various horticultural specimens being blown down. Temporary wooden screens were erected and new plantings of pines took place.

A previous disaster in January 1988, when there was a week of severe frosts and deep snow, resulted in the loss of 80% of South African and Australian plants.

In the December 2000 issue of the newsletter, Tony writes his latest report of 'Tresco Visiting' - in October 1999. He writes that the replanting of pines after the 90s gales is doing well.' Ed.

Winter Gardens, Aberdeen

Murray MacDonald, of Portree, Isle of Skye, informs us that on a recent visit to the Winter Gardens, Duthie Park, Aberdeen, he came across a complete border planted with Australasian Plants, with plans to extend this planting. The planting includes *Anigozanthos,* 5 or 6 varieties of *Callistemon, Grevillea, Hakea, Leptospermum, Phormium* and *Pittosporum.*

So, if you find yourself in Aberdeen, pop into the Winter Gardens.

NIGHT AND DAY

Adapted from an article by Rod Saunders, Silverhill Seeds, South Africa

Germination of "winter rainfall" temperate species - these are plants experiencing a cool wet winter and a summer with likely long hot dry spells.

In nature germination takes place after the autumn rains, growth continues during the winter, maximises in the spring and slows down in the hot summer.

A major factor in stimulating germination is the day/night temperature differential of some 10-15°C - day temperatures are often up to 25°C but drop to 10°C or below at night.

Seed sown in a glasshouse maintained at a constant temperature (even a modest one) will give poor germination - even with smoke treatment.

The best way of achieving this here in the U.K. would seem to be sowing in May-June in a cold glasshouse or frame. Let temperatures rise during the day, minimising ventilation if necessary, but open up all windows and doors at night to achieve the lowest temperature.

This all sounds a little "topsy-turvy", but seems worth trying.

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Hakea clavata

By Jeff Layman

I obtained some seeds of *Hakea clavata* (Coastal Hakea) in 1987, and the next spring they germinated readily, resulting in a half-dozen or so seedlings. Over the years they have grown steadily, and this year 2 of them flowered for the first time.

These Hakeas are small shrubs about 60 - 90 cm tall, rather spread out and straggly like most Western Australian plants, with extraordinarily succulent leaves. These are like flattened cylinders up to 80 mm long, 10 mm wide, and 4 or 5 mm thick, ending in a sharp point. The flowers are typical of Hakeas; they are deep dusky pink to red, becoming white at the curved end of the style. They have a marked sweet, honey-like scent.

The plants have proved surprisingly easy to grow and seem remarkably hardy despite their succulent leaves. The greenhouse is kept at only 1 - 2°C, and I have never seen even a trace of mould on the leaves. Perhaps, being used to salt spray, they have a waxy coating which fungi cannot easily penetrate. I doubt they would survive a true frost, but maybe I will try leaving part of a plant exposed just to see what happens.

IT'S A STRANGE WORLD
By Tony Entwistle

Did you know, dear member, that you had joined a dangerous society?
Neither did I, but let me explain.

I had cause recently to phone around different insurance companies to enquire about public liability insurance for the Society's meetings.

The conversation I had with one particular (well-known) company's official was so extraordinary that I feel it is worth recounting.

I had already explained about our society and meetings, and the dialogue then went as follows (excuse the grammar)-

- Him: horticultural, you say.
- Me: yes.
- Him: I don't like the sound of that (pause). Is that the same as gardening?
- Me: well, yes, more or less.
- Him: so you actually handle plants? (said in a horrified tone, as if we were running a cannabis co-operative).
- Me: Yes, that is what gardeners have to do.
- Him: Oh dear, that is very high risk. (At this stage, I began to wonder if next time I went out of my back door, my Wisteria would leap out and strangle me).
- Me: But we do not fell or plant trees at our meetings, and they are not held on the top of Everest. We are much less risk than a bunch of old ladies running a church bring & buy sale (this was a very chauvinistic remark, but it was his fault).
- Him: (reluctantly) Well, we will discuss your request and think about it and let you know, which they did - they obviously did not want to touch us with a barge-pole, their quote was so astronomical.

So there you are - I must go into my garden now - where's my crash-helmet, protective suit and breathing apparatus?!

ASTELIA YOUR HEART AWAY.....

By Tim Longville

Whenever I visit Hugh Barr's fine garden at Beauhill outside Penrith, I always get an instant education in the attractions of many unusual Australian and, particularly, New Zealand plants. One genus I'd never previously given much thought to, for instance, but which featured strongly there, was the genus *Astelia*. The only species at all 'commonly' grown in the U.K. is the large and imposing silvery bulk of *A. chathamica* aka *A.* 'Silver Spear'.

Most of the species come from around the Pacific. There are apparently 13 species from New Zealand and three from Australia. Outlying species occur in the Falkland Islands, Reunion Islands, Hawaii and Mauritius. I'll deal briefly first with what I know about those species more or less available in the U.K. at the moment, then with what I know about at least a few of those which aren't available but which might be worth at least the gamble involved in buying a packet of seed. Essentially all are grown as foliage plants. The flowers are insignificant and, though the usually orange-coloured berries *might* be attractive (some people think yes, others very much the reverse), most species available in the U.K. carry them tucked away at the heart of their leaves so they are not precisely eye-catching.

Apart from *A. chathamica*, U.K. Nurseries, according to *The Plant Finder*, stock *Aa. banksii, solandri* (syn. *cunninghamii), fragrans, graminea, grandis, nervosa, nivicola*, and the form of it known as 'Red Gem' - which, as Hugh Barr has discovered, isn't always as red as the buyer would like and expect.

A. banksii (Wharawhara, though I'm told the wh- is pronounced as f-, so farra-farra, more or less; 'it's a sort of f with a puff' says Jeff Irons!) Occurs in lowland and coastal forests on North Island and on sea cliffs. In the wild, it makes clumps between 1 and 2 metres tall of narrow silver-green leaves. The berries are green flushed magenta. I don't think I've seen a living specimen of this plant. It sounds handsome but, given its North Island origins, perhaps only feasible in really mild gardens. Understandably, in this case, the few U.K. nurseries which stock it are all in the extreme west and/or south. Personal experience of growing it, anyone?

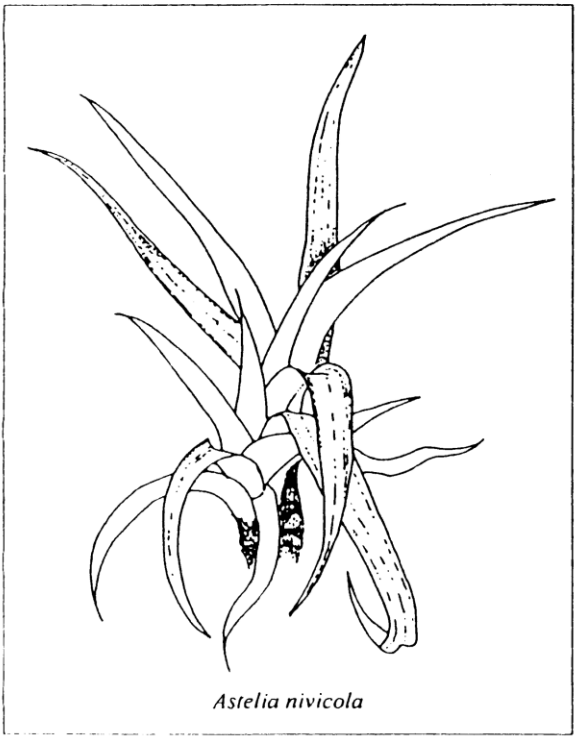
A. solandri (Kowarawhara; syn *A. cunninghamii*) is one of the fascinating natural epiphytes among the genus. It occurs on the branches of lowland trees throughout North Island but also in the Westland of South Island (forms form which area would presumably be hardier?). It's about the same size as *A. banksii* but in this case the upper surfaces of the leaves are glossy green, the under surfaces silvery. Growing it as an epiphyte requires a big tree as it can reach 2m in height in the wild. Grown in the ground, it will tolerate either part shade or full sun - and in sun this is apparently one of several species which can develop a red flush, in this case particularly to the *tips* of its leaves.

Astelia fragrans is one of the commonest species throughout New Zealand. It grows in forest and scrub from the coast up to about 900m/3000ft. It's also one of the biggest, with individual leaves up to 2m long. The leaves are broad, have a silvery sheen, and (again) their ribs are sometimes (not always) flushed with red. Among U.K. nurseries, only the usual suspects in the far south and west offer this one, though my New Zealand friends think it ought to be among the hardiest. They describe it as an excellent filler for large spaces - so if you've any large spaces in need of filling ... (Pause for chorus of

'Chance would be...'). They do add that in moist, humid climates it can sometimes be difficult and in those conditions would need to be given a very well-drained spot. Gary Dunlop reports that it flourishes at Mount Stewart. 'There is a clump at the far end of the lake...which could be mistaken for a phormium' and there are further spreads in the Lily Garden, where divisions of the original lakeside clump have simply been inserted into rough grass, as underplanting beneath eucalyptus.' He also adds, less encouragingly, that as far as he's concerned it is 'not especially handsome'.

A. grandis is rather similar to *A. fragrans*: large, imposing, with leaves olive-green above and silvery below. The leaves of the 'Swamp Astelia', as it's known in New Zealand, are broader, shorter, more erect and less tapered than those of *A. fragrans*, however. Clumps can often be 2m or more high, particularly in the swampy ground which, as its common name suggests, it prefers. It occurs from the lowest levels to considerable heights throughout North Island and as far south as Canterbury. Though its 'situation of choice' is damp shade, in the wild and in New Zealand gardens it copes uncomplainingly with drier and sunnier conditions. It probably would here, too.

A. graminea is very different. It certainly lives up to its name, being a low grass-like clump to no more than 50cms high. On the other hand, its leathery, silver-bronze leaves make it attractive either grown in a group as ground cover or as an individual specimen in a small container. Since in the wild it can occur in low alpine areas of the Nelson-Marlborough region, it should have a fighting chance of hardiness. I'm told that the foliage looks its best when the plant is grown in full sun and poor soil.



Astelia nivicola

A. nivicola is another from alpine areas, in this case low alpine areas (1100/700m or 5500/3500ft) in South Island. In the wild it's most often found in high rainfall areas and, even then, in the wettest spots it can find, such as damp snow-hollows among snow tussock-herbfield. 'Looks as though it would like your climate,' teased my Kiwi informant. Usually the leaves are yellowish-green with a silvery underside and perhaps a hint of red along their margins but there are forms (such as 'Red Gem') chosen for the richness of their red colouring. As with *A. solandri*, growing in sun encourages the red colouring to develop to its fullest. I suspect that may have been the problem with Hugh Barr's not-very-red 'Red Gem': he'd

concentrated on imitating its natural habitat by giving it damp, rather than on encouraging its 'red tendency' by giving it full sun.

All my New Zealand friends are agreed, anyway, that *A. nervosa* 'Alpine Ruby' is a much better plant: bigger, bolder, and much, much redder. Unfortunately, 'Alpine Ruby' is at present not available in the U.K. *A. nervosa* is a particularly variable species, in which the leaves can be from 80cm to 2m long and almost any colour from silver through green to red. It's reasonably hardy but does need extremely good drainage or the roots may rot. The suggestion from New Zealand was that in the U.K., particularly on the wet West Coast, it might be best treated as a container plant, given a particularly gritty and free-draining compost.

What was sometimes found in U.K. nurseries as *A. graminifolia* is now re-located to the desirable select neighbourhood of the genus *Collospermum*, in which there are only four current residents, one from Fiji, one from Samoa, and two from New Zealand. The New Zealanders are *C. hastatum* and (our old friend, *A. graminifolia*, in cunning disguise) *C. microspermum)*. Judging by their distribution (throughout North Island and the upper half of South Island, in coastal and lowland forests), both might just about be feasible in the mildest U.K. gardens, with *C. microspermum*, which is usually found at slightly higher altitudes, perhaps being marginally tougher. Both have leaves which can be almost 2m long, while *C. hastatum* has berries which are red, *C. microspermum* berries which are, sadly, virtually colourless. Both are also astelia-like in often being found as epiphytes on forest trees.

I'll deal with a few more New Zealand species, though most are probably not good candidates for growing in the open ground in the U.K. and the others are probably not distinguished enough to be even worth the attempt.

Gary Dunlop tells me that among the many astelia species he grows one of the rarest in U.K. cultivation is *A. petriei*, which he doesn't list yet, not having enough stock. He thought is was a New Zealander but knew nothing else about it. Kiwi friends confirmed that it is indeed a New Zealand native - but not one grown in New Zealand gardens. It's another low-growing alpine species, from wet mountain-top sites on South Island. One Kiwi informant asserted, 'I suspect it would not take kindly to captivity,' though she didn't give a reason for her suspicion. A challenge to Gary to prove her wrong! The leaves are pale green above, white below, and the berries are yellowish-orange.

A. skottsbergii 'resembles', to quote Jeff Irons, 'small plants of *A. petriei.*' It's another South Island plant from mountain areas, at around 1200m/4000ft, but in this case from rocky outcrops among snow tussock grassland, so perhaps even less likely to 'take kindly to captivity'. Leaf- and berry-colour are very similar to those of *A. petriei*, though in this case the green of the upper leaf-surface is said to have a blue-ish cast.

A. linearis should be among the hardiest species, since it's an alpine found right through South Island and down to the Auckland Isles, but on the other hand it's also one of the smallest, making low mats with slightly silvery leaves only a few inches long. It comes from moist, even boggy, peaty areas, so if you have a damp semi-shaded spot which needs an unusual ground cover, then perhaps....But, otherwise, perhaps not.

A. subulata is similar but with shining bright green leaves - and it's even smaller than *A. linearis*. So, if you have an extremely tiny, damp, semi-shaded spot....To quote Mark and Adams in *New Zealand Alpine Plants*, 'It is a very insignificant plant.'

After this sequence of the vertically challenged, it comes as a relief to move to *A. trinervia*, which is at least big though probably also impossible. Kauri grass occurs mainly in North Island forests so I had thought that it would probably stand only a breath of frost, if that. Since it also likes it on the dry side I'd thought its preference would be difficult to satisfy in what would presumably have to be, if *any* U.K. garden, then an extremely western (and southern) one. A pity, I concluded, since its big, bold, phormium-like leaves, 2m or more long, sound as though they might be distinctly garden-worthy: 'a feature,' no less. However Gary Dunlop tells me I over-estimate both its tenderness and its demand for dryness. At least, I do if you get your seed, or plants derived from seed, from the sort of sites likely to produce maximum hardiness. Gary has a plant he obtained from Graham Hutchins which has survived for several years in the ground in Co. Down's distinctly damp climate, including cold spells when temperatures fell to at least -8°C. A species worth some experimental enthusiast's attention, perhaps.

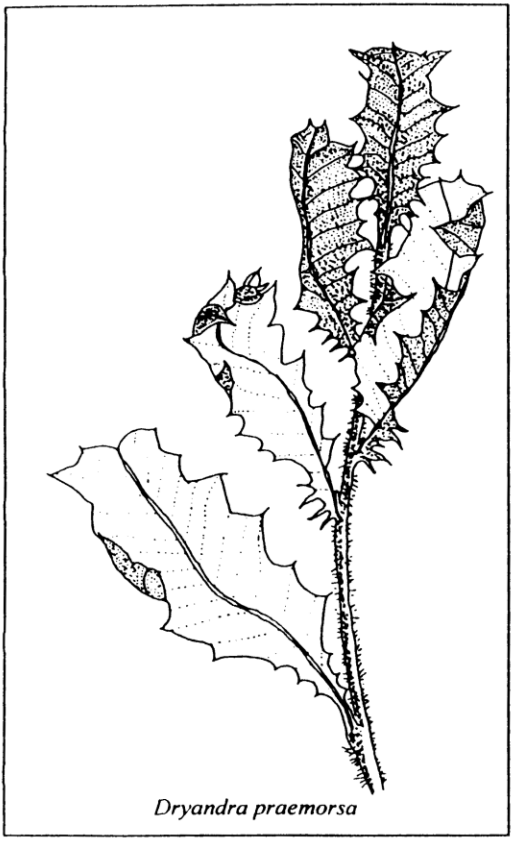
So much for the New Zealanders (I'm sure there are species I've missed but I hope they're only more of the 'insignificant' brigade). The only Australian species to which references are common is *A. alpina*, occurring in two forms, either var. *alpina* (from Tasmania) or var. *nova-hollandiae* (from mainland NSW and Victoria). Pineapple Grass is another of the tiddlers and a species where the common name is probably more attractive than the plant. (The name *is* attractive - but how and why did it originate? Can anyone explain?). Says Jeff, 'When crossing a marsh Tasmanian bush-walkers use tufts of Pineapple Grass as stepping-stones, to keep their feet dry.'

There are other Australian species, however, though, probably no more garden-worthy than *A. alpina*. The first is the closely-related *A. psychrocharis*. No, that's not a misprint: *psychros* = cold, *charis* = delight (thanks to Jeff Irons for the etymological explanation), because this is a plant which loves cold, marshy conditions. It's in fact endemic to the alpine and sub-alpine areas of the Kosciuszko Mountains in New South Wales, often growing alongside *A. alpina* but if anything in rather better drained sites. It doesn't just share *A. alpina*'s habitats, it also shares its appearance, being, to all intents and purposes, a slightly larger, coarser and more vigorous version of it. And Jeff tells me that there was also an Australian *A. nervosa*, different from the New Zealand *A. nervosa*. Thankfully the confusion has been removed by renaming the Australian species - *A. australiana*. It's a Victorian endemic, with leaves between 1 and 2 metres long, white flowers and orange berries, and occurs in moist sheltered gullies at around 300-600m/ 1000-2000ft.

Note
If anyone has any experience of growing astelias, please let your editor know. Also, APS member Lee Mullen has asked for any information about a species which he believes is called *A. glauca*. Can you help?

Growing Dryandra

By Jeff Irons



Dryandra praemorsa

Dryandra became known to the general public when Noel Kingsbury exhibited them at the Chelsea Flower Show. In spite of that they have never figured prominently in the APS seedlist, and are not readily available from nurseries. In case you have not heard of them dryandras are *Protea* relatives found in the southwest of Western Australia. Their prominent characteristic is strikingly toothed leaves, which make them outstanding foliage plants. Most come from places that are very dry in summer, and that are well drained during the winter rains. They are not winter hardy outdoors in Britain. In cultivation they need well drained conditions, and most prefer good light. Many *Dryandra* are quite large, and some are difficult to cultivate. Those in our seed list have been selected because their small size (less than 1m high) makes them suitable for protected cultivation. Most are fairly easy to grow. The more difficult ones are *D. baxteri, kippistiana* and *quercifolia.* The last of these three, *D. quercifolia,* is very rewarding, because its golden yellow flowers are borne when the plant is still young. In the very wet November 2000 I saw it growing on the Central Tablelands of New South Wales, near Wellington, and obviously standing up to the long period of wet summer conditions.

You must use a very well drained mix for *Dryandra*, and one which has about 75% coarse sand/grit/Perlite and the remainder pine bark, peat or Vermiculite should be satisfactory for both seed sowing and potting. When transplanting you will need to add a small quantity of slow release low phosphate fertilizer. Later on, yellowing leaves may indicate that a dose of chelated iron is needed. Apart from that their cultivation should not pose any problems.

CLEANING THE ENVIRONMENT THE NATURAL WAY

We all know how beneficial houseplants are to the environment, eg *Chlorophytum comosum* absorbs formaldehyde from the atmosphere. According to a report in Chemistry & Industry (7.1.02), eucalypts could be the answer to a cleaner world. It has been discovered by researchers at the University of Melbourne that eucalypts and some indigenous grasses are capable of absorbing heavy metals from the soil. To test the effectiveness of the plants, several species of eucalypts and grasses are to be planted in an area of pollution (heavy metals, arsenic and cyanide compounds) around a gold mine.

Bead Plants

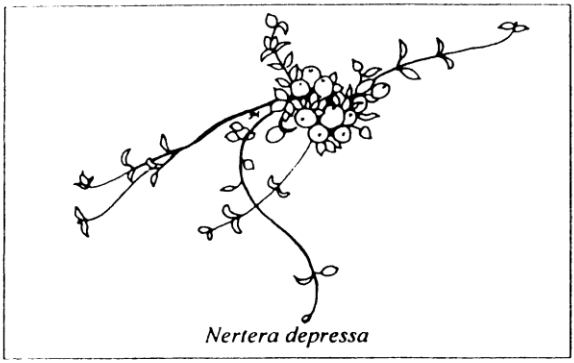
By Brian Halliwell

Bead plant is a common name for species in the genus *Nertera* which belongs to the family *Rubiaceae*. occurring in Australasia, Malay, Central and Southern America and Tristan da Cunha. Seven occur in new Zealand and this article will deal with two of them.

The genus is perennial with opposite stipulate leaves. Inconspicuous green flowers usually have four petals but can have more. Whereas some New Zealand genera within *Rubiaceae* can be dioecious, both stigma and stamens are present within each flower of *Nertera*.

For most of the year, plants of *Nertera* would be unnoticed. They come into their own when in fruit and the display can last for 2 or even 3 months.

Propagation can be by seed, which is offered by some seed firms and is listed in seed exchanges, especially that of the New Zealand Alpine Garden Society. Seed does not seem to be long lived and is better sown immediately on receipt. Moist seed storage seems preferable to dry. If collecting seed from your own plants, extract from the pulp and wash before sowing. Established plants can be lifted and divided in spring as they start into growth. More usually propagation is by stem cuttings of new growth taken in late summer.



Nertera depressa

Containerised plants are frequently grown by alpine enthusiasts for alpine house display in winter. These are equally satisfactory in shady parts of conservatories, especially when unheated. They will grow outside in moist soil such as a peat garden or at the edge of water if there is a stream or pond on the rock garden. Plants seem better in shade than in full sun.

N. balfouriana is the finer of the two species. It has light green somewhat fleshy prostrate and glabrous stems with tiny oval leaves up to 5mm which grow close together. Fruit, surprisingly large at up to 10mm, is pyriform and varies from yellow to the more common orange. In New Zealand it has a considerable altitudinal range from sea level to 1330m. It occurs on the floors of rain forests and in the open alpine regions.

N. depressa is similar in habit to *N. balfouriana* but has fruits which are globose and red. Fruits are variable in size from some as small as a pin head to 5mm in diameter. It has a similar range of habitats to *N. balfouriana*. Some years ago attempts were made to popularise *Nertera* species as house plants. They were unsuccessful because houses were to dry for plants to thrive.

Problem Possums

Richard Christmas sent in the following snippet of news : In the December 2001 issue of Pentachondra there is a reference to the New Zealand Christmas Tree, *Metrosideros excelsa*. I have recently returned from NZ where I noticed that a ridge overlooking Queen Charlotte Sound, which used to be crowned with a splendid display of *Metrosideros*, was now bare. Every mature tree had been destroyed by possums.

This destructive introduction from Australia has now been joined by the red-backed spider which was brought in on earth-moving machines.

Winter Report, Leeds, 2001/2002

By Thomas Naylor

As I write this, in early March 2002, *Eucalyptus cordata* has almost finished flowering and *Grevillea* 'Canberra Gem', against a south-facing wall is about to begin; the pale pink buds are starting to turn red and will extend so that by next month the display of blossom will make this shrub a genuine ornament to the garden.

The early months of 2002 have demonstrated how a well-anchored Eucalyptus, planted in the ground before the roots become pot-bound, can stand up to constant buffeting with gusts of 70mph and more. *Eucalyptus glaucescens* and *perriniana* will produce small white flowers in summer from the buds which began to develop last autumn.

The coldest period of the winter was around New Year, the lowest temperature recorded here being -8°C on the second of January, but there have been few frosts since the middle of that month.

I allowed some plants in pots to endure temperatures as low as -4°C in December before taking them under cover. *Kunzea baxteri, Banksia ericifolia, Melaleuca hypericifolia* and *Cordyline stricta* were all damaged, but none fatally. Also in pots *Banksia integrifolia* and *Kunzea parvifolia*, placed to the east of the house, survived the whole winter unprotected, but *Hakea saligna*, more exposed to the prevailing winds, has suffered rather badly. In the ground to the west of the house, *Melaleuca squarrosa* looks as bad as I have ever seen it with almost all of the tiny leaves dry and shrivelled; though close by the leaves of *Banksia oblongifolia (aspleniifolia)* are as bright and glossy as ever. Neither the two *Leptospermum scoparium*, nor the various callistemons seem to have suffered at all this winter.

I kept a *Calomeria amaranthoides* in a pot over winter 2000/2001 and planted it out in the spring; it failed to flower in its second year so I dug it up in autumn and put it in a pot again and then it died.

*****

Karwarra Australian Plant Garden, at Kalorama, Victoria, covers 2 hectares and features a wealth of Australian plants, including native orchids. There are also Boronia and Telopea collections. Because the aim of the garden is to create a natural environment, local wildlife abounds: flocks of native birds and even tree frogs.

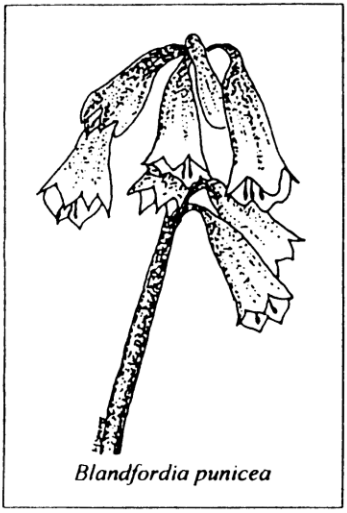
To learn more about this garden, come to this year's AGM at Sheffield Botanical Gardens (see page 1).

www.yarraranges.vic.gov.au/karwarra

Some Plants from this Year's Seedlist

Last year we expected that the grass addicts would rush to get seeds of the gorgeously named *Gymnoschoenus sphaerocephalus*. There were only two requests for it! Found all the way up the east coast, it is Australia's visual equivalent of our cotton grass. This tussock forming sedge has leaves up to 60cm long. Its culms, up to 1m high, are topped with spherical white flower heads. They ripen to display brown button shaped seed heads. They, not the flowers, give rise to both vernacular and botanical names. Our seed came from high up in Tasmania.

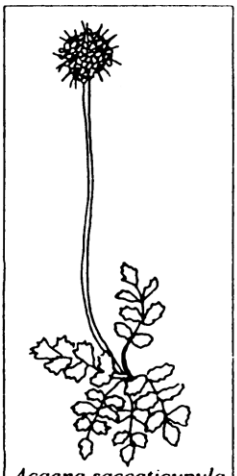
Eucalyptus cinerea is one of what Americans call the Silver Dollar eucalypts. With nice white juvenile leaves, it is a good plant for flower arranging. It should be hardy over much of western and southern Britain.



Blandfordia punicea

There is always a demand for blandfordias. Our seed of *Blandfordia grandiflora* and *punicea*, from a private garden, is fresh every year. Do remember though, that it usually takes two years to germinate, then another 5 to 7 to flower. A compost between pH 5-6 is ideal.

Boronia heterophylla is one to split marriages through argument! While many people find its delightful scent powerful, others cannot smell it at all. Most people will have to treat this as a plant for the cool greenhouse. Like all boronias it is not easy to germinate, leaching is recommended.



Acaena saccaticupula

Acaena saccaticupula is an unwieldy name for a nice plant that is ideal for planting in gravel.. Totally prostrate it has brownish, weed-smothering small leaves. Throughout summer and autumn it carries bright red seed heads. Unlike those of most acaenas they do not have barbs, so will not adhere to clothing. Our seed is garden grown, from a Chris Chadwell collection.

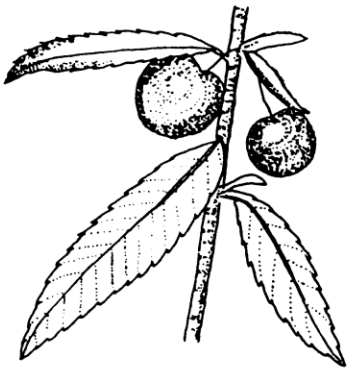
Viminaria juncea. Commonly known as Golden Spray or Native Broom, this tall weeping shrub is found in moist temperate areas in all states except the Northern Territory. The branches are almost leafless and small bright yellow pea flowers are produced along the branches in late spring and early summer. Propagation by seed - cover the seed with boiling water and leave to stand overnight before sowing..



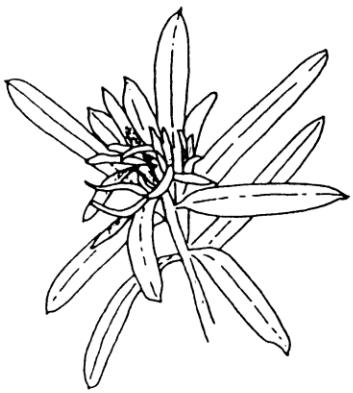
Bulbinella hookeri

Bulbinella hookeri is found on North and South Island. Local populations may be variable. Of particular interest are those plants from northwest Nelson and Mount Stokes in Marlborough which have glaucous leaves. Easily grown and tolerant of many soil types. It will grow in full sun or light shade, both preferably with a supply of ample moisture. The flowers are buttercup-yellow.

Aristotelia peduncularis is endemic to Tasmania. It is found in moist shady forests and fern gullies. White bell-shaped flowers are followed by fruits which are dark pink or red heart-shaped, 1-1.5cm in diameter, giving the plant the common name of Heart Berry.



Aristotelia peduncularis



Podocarpus elatus

Podocarpus elatus, the Illawarra Plum, is capable of reaching 45m in height in its native coastal Queensland and NSW. Its suggested use in Europe is as a houseplant. When mature the leaves can be upto 18cm long, linear and sharply pointed. Flowers are borne on separate male and female plants, followed by plumlike bluish-black or purplish fruit.

Gingidia montana is a New Zealand member of the carrot family. The leaves have 5-10 pairs of broad leaflets, shining green above, glaucous below. The flower stems, upto 50cm tall, carry compound heads of white flowers. When the leaves are crushed, there is a strong smell of aniseed.

Please remember the APS when harvesting seed from your Australasian plants and donate some to the seedlist.

A Matter of Pronunciation
By Thomas Naylor

Not many people make much mention in the newsletter of growing Australian annuals including *Bracteantha*, commonly known as *Helichrysum*. This gives me the opportunity to point out what should be accepted as the correct pronunciation of this word.

As many people know the first syllable of helichrysum should be pronounced with a short 'e', hell, as it is the current latinized version of the the very ancient Greek plant name helichrusos, which begins with the letter epsilon (short 'e'). A useful comparison is with heliotrope, heliotropion in the original Greek which begins with the letter eta (long 'e'), hence - heel-. Needless to say, there is no separate letter for the initial aspirate in Greek. Since the 'u' in chrusos is marked long, Hell-i-crise-um would appear to be the preferred pronunciation though Hell-i-criss-um should be acceptable. All this can be easily verified by reference to Liddell and Scott's Greek lexicon.

WINTER REPORT 2001/2002 IN KNAYTON

Although Knayton experienced several freezing spells and periods of snow, winter has not been particularly cold or prolonged.

The weekend before Christmas saw the garden covered in 20cm of snow, but it didn't last long as a thaw set in on Christmas Eve when milder weather arrived.

Snow returned on the 30th accompanied by freezing temperatures. On the way to work, at 8.30am, on 31st December, the temperature was -8.5°C, rising just a few degrees during the day. That night it again dropped to -8°C, followed by -12°C the night of January 1st.

Although the snow cover had just about gone by Friday 4th January, the days weren't any warmer due to the appearance of the Vale of York freezing fog.

Plants in the garden don't seem to have suffered because of the low temperatures, except for *Eucalyptus eximia nana* (which Jeff Irons suggests I call *Eucalyptus* "Nana" as there is apparently no such plant by the name I have been using since buying the seed in 1991). I usually overwinter this eucalypt in the greenhouse but lack of space meant that it had to take its chance outside. Positioned against the house wall, it was looking fine until the turn of the year, but now looks a sorry sight with browned foliage; I suspect that its dead but I'll give it a chance to reshoot during the summer.

Plants in the greenhouse have fared less well. In early January there were the first flower buds on *Templetonia retusa* and *Indigofera australis*. But by 11th February some of these buds had shrivelled and dropped off. I don't know if this was a delayed reaction to the earlier freezing

nights when my greenhouse heater couldn't keep the temperature above 0°C or whether there was another reason.

Another cold spell occurred in late February with 20cm of snow cover accompanied by several nights of low temperatures (-5°C). This cold spell was followed by a milder one which woke up the resident frog population. March 4th saw the first clump of frog spawn in the newest of my three ponds. Less than a year old, its a privilege to see it being used as a maternity ward for the frogs which usually inhabit the largest pond.

Writing this report in mid March, I have two greenhouse specimens to comment on; one is definitely dead, the other is struggling but I suspect by the time this issue is printed, it too will also be dead.

The first specimen, the struggler, is *Kunzea baxteri*, which I have nurtured for the past 14 years, having sown and germinated the seed in 1988. This is the Scarlet Kunzea, native to Western Australia. Its an open spreading shrub with crowded foliage on drooping branches which I find are brittle and easily snap. The crimson-scarlet flower spikes are spectacular; I've never had any trouble getting the plant to bloom.



Acradenia frankliniae

This winter, since the turn of the year, the foliage has, bit by bit, taken on an unhealthy appearance. Just one small branch at present looks well. I have no idea why it has decided to go into decline but I don't expect it to live much longer.

Another plant that is definitely dead is *Acradenia frankliniae*, bought in 1994. This shrub had been struggling for the past few years. Scale insects had gradually weakened it and this winter it finally went to 'Plant Heaven'.

Although I don't like losing plants, it gives me the opportunity and space to grow something else. Now, where is the seedlist!

GOODIA LOTIFOLIA

By Jennifer McGrady

Some time ago, I wrote that I had been given seed of this, but could find no information about it, beyond the fact that it is 'a good plant for cold climate gardens'. Unfortunately the seed was bought in Canberra, so the 'cold' had to be taken with a very large pinch of salt. I had an encouraging reply from Jeff Irons, so had a go.

The seeds germinated quickly and easily (soaked first until they swelled, as recommended on the packet) and the seedlings grew on well until I put them outside for the summer. Overnight, snails reduced them to sticks and they didn't recover. I tried again the following year, and managed to keep some of them out of snails' reach, and the year after, in one litre pots, they flowered – bright yellow pea shaped flowers, not too many, but they were only small plants. I put them outside for the summer - and the snails got them again. I still have some seeds, so I will probably try again. The question is – is it worth it?

Jeff has sent me a photograph showing a *Goodia* planted out, with shelter at the sides and perhaps overhead as well, still in full bloom in October. Now this definitely is worth growing, and if I lived in Canberra, it would certainly be in my garden. But is it worth greenhouse space? At least, the amount of space that most of us can afford?

I am in two minds about many of the tender shrubs which I have grown at various times. They don't do well in small pots (indeed, why should they?) so they don't get potted on as they probably should, and they linger unhappily for a few years and in the end usually succumb to red spider. Callistemons seem slightly more amenable than most, but I have yet to see an Acacia flower, and even Prostantheras, which do flower, look anything but healthy. Would they respond to feeding, and if so, with what?

I suspect that the answer is to take a long hard look at the amount of space I have, grow less, and grow it properly – but then which do I choose?

Some thoughts on membership

Each year we lose some 20+ members, and this year it appears likely to be 30+.

My address list is in order of joining the Society, and it is interesting that the first page of some 40 members, who joined in the first 3 years, has remained unchanged, apart from a few deaths and emigrations - so the "founder-members" have all remained loyal. In fact over 70% of our annual losses are from members who have joined in the past 2 years, so why are they dissatisfied? We simply do not know, because nobody ever tells us - it would be nice to have some frank critical letters.

So we can only guess why. Did they expect more communications from us, such as more newsletters, or did they want more "local" activities, by which I mean meetings within around 50 miles or so of their home. In the north we have already arranged these, but it is entirely up to, for example, members in the home counties or the west country to start these between themselves. Such informal get-togethers need not involve a member's garden, simply a suitable rendezvous where there can be a social exchange.

If any member has suggestions, please let us know.

Tony Entwistle

Two Prostrate Coprosmas

Brian Halliwell

The genus *Coprosma* belonging to *Rubiaceae*, contains about 100 species of which 45 occur in New Zealand. They are woody evergreens which vary from those with a prostrate habit through small and medium upright, often spreading shrubs to some which are large and a few are tree like. Leaves, which are stipulate (stipules are small leaf-like appendages, found one on either side of the leaf-stalk in many plants), are in opposite pairs and some of the larger kinds are handsome especially when there is variegation. Flowers which are greenish with 4 petals are inconspicuous; males and females are produced on separate plants. Following pollination, colourful berries are produced which in most species are especially handsome

In British gardens the few hardy species which are prostrate make extensive carpets. When there is but one plant in a garden all that can be enjoyed are the tiny dark green leaves which are crowded and mat like. Two plants at least are required which must include both sexes for fruit to be produced. Few nurseries offer sexed plants so it is better to raise your own from seed. Seed is offered by some seed exchanges, especially that of the New Zealand Alpine Garden Society. On receipt, clean the seed if it is still contained within the fruit and wash. Sow evenly and thinly, a few to a container, in a well drained lime free soil based compost. Whilst cold is not essential to germination it seems to stimulate it, so plunge the container out of doors and cover with wire netting to protect against birds. In any sample of seed the highest proportion will be female which develop more quickly than the males. Do not prick out or transplant the seedlings but when overcrowded, as is usual, there can be some thinning. Plant out pots of seedlings when a year old in: peat garden or in a crevice between stones on a rock garden. As they make extensive carpets up to a metre across, allow plenty of space.

Coprosma petriei is prostrate with crowded, narrow elliptic leaves up to 7mm long on pubescent branchlets. Translucent oval or globose berries about 7mm in diameter range on colour from white through shades of blue to purple as well as pink or red. The first time I found this plant in New Zealand was on the airfield at Te Anau in the south west of the South island in 1962. It was present in such quantity that it had choked out much of the grass and planes were landing on a carpet of *C. petriei*. Passengers walking from planes to the arrival buildings could admire berries of many colours.

C. pumila, also a prostrate carpeter is less dense. From glabrous branchlets, thick light green leaves of similar size are produced but they are less crowded than on the previous species. Globose fruits which are up to 10mm in diameter are orange or orange-red.

My first viewing of this plant was on the Brunner Range to the west of the South island of New Zealand in 1964. I was there in October and winter snows were still receding. Although much of the terrain was bare, there was still much snow in hollows. *C. pumila* present in quantity massed with berries must have been covered by snow for several months. Plants were growing at 1200m along the edge of a stream and around a small pond in a moist peaty soil.

Snow Gums

Jeff Irons

There seems to be an awful lot of confusion surrounding the Australian Snow-gums. I hope that this short article will sort things out. The alpine zone is defined world wide as where the mean maximum in the warmest month is 50F (10C) or less, and by definition no trees grow in the alpine zone. In Australia the tree line is formed by Snow-gums, and they extend downwards from the moist tree line through the sub-alpine and into the dry tablelands of the montane region. At the tree line we find *Eucalyptus pauciflora ssp. niphophila*, or in some places the Jounama Snow-gum, *E. pauciflora ssp. debeuzevillei*. Both are small trees, with a short, thick trunk that often forms contorted shapes. In Britain they have been found to be the hardiest eucalypts, and will withstand continuous cold weather at -16C and short spells of -18C or below. In the high country *E. pauciflora* itself is found all the way down to the 400m level. In some other places it actually grows almost at sea level. Consequently before attempting to grow *ssp. pauciflora* one needs to know the origin of the seed or plant. It used to be thought that the species now called *E. lacrimans* was a sub species of *E. pauciflora*. It is a small grey leaved weeping tree, about 4m high. Although Celyn Vale uses the botanical name, all the other nurseries listing it in the 2001-2 Plant Finder use the name *E. pauciflora* "Pendula". Our APS seed was collected between Adaminaby and Berridale.

GROWING PLANTS IN OXFORD

By Ivor Lansbury

Since moving to the centre of Oxford with a small garden on the flood plain, I've switched from growing alpines to other plants, including Proteas and actually managed to have one flower last summer. Callistemons also thrive, some in pots and others in the open ground where they compete for space with *Eucryphia milligani* which is now almost 3m in height but which is still to flower. These open ground plants are on a raised bed. The garden soil was dug out and replaced with a mixture of ericaceous compost/soil, finely ground pine bark (composted), sharp grit etc. These plants are partially sheltered by Camellias which are a bit too vigorous. Some plants are overwintered in a greenhouse but I have come to the conclusion that it is light they need rather than heat.

Thinking of writing an article for Pentachondra?

If so, please try to include the following items of information :-

* Topography of area
* Sheltered/exposed site
* Soil type
* Average rainfall
* Average winter
* Any other hints and tips for successful growing

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