

AUSTRALIAN PLANTS SOCIETY SOUTH EAST NSW GROUP

Newsletter No. 99- February 2014

NEXT MEETING- SATURDAY 1st March 2014 AT 10.30AM

Native Plants in private and public landscaping

With David Charlton from Provincial Plants and Landscapes, at Wandella near Cobargo

For details, see pages 7 & 8

| <u>FUTURE MEETINGS</u> | | |
|-------------------------------|--------------------------|----------------------|
| DATE | GENERAL/COMMITTEE | TIME/LOCATION |
| 7 th May 2014 | Committee | Jenny John's |
| 7 th June 2014 | General | To be advised |

CRINUM PEDUNCULATUM: a dramatic addition to a garden *By Jennifer Liney*



Crinum pedunculatum is a large, perennial, lily-like plant that grows naturally along streams and rivers and behind coastal beaches from the Northern Territory, through north east Queensland, and in New South Wales as far south as Broulee and Moruya in New South Wales. It is said that its distribution is limited by the warm south-flowing sea currents that terminate off the Eurobodalla coast.

Because it is common beside swamps, creeks and watercourses, its common name is Swamp Lily, or River Lily. These names imply that the plant requires 'wet feet', but this is not necessarily so. It grows equally well in soil under casuarina or eucalypt trees, in loamy or clayey soils, in full sun or in shade. It is one tough plant.

(Photo from Wikipedia Encyclopedia)

So it will grow well in any garden, particularly a big one, where it looks great if planted, one or two, or even three together, well apart, so that each can spread to its full 2-3 metre width. The large leaves are burned by frost if there is no shelter, but the plant recovers well in the spring.

Originally, *C. pedunculatum* was placed in the Liliaceae family, but later research has it in the Amaryllidaceae, a family where most of the members have bulbs. These include *Amaryllis*, *Narcissus*, *Hippeastrum*, and *Nerine*.

Like many of our Australian plants, it was named by Robert Brown in his 1810 publication of the flora of New South Wales, and, also like many others, the Type Specimen was collected from 'Port Jackson'. In the period since Robert Brown's publication, the Swamp Lily has gone through 13 name changes, the latest in 1994 when it was considered to be part of the *Crinum asiaticum* complex. Current thinking has it that *C. asiaticum* only occurs on Christmas and Cocos Islands, so it is now back to Robert Brown and *C. pedunculatum*.

The generic name, *Crinum* comes from the Greek *crinon*, meaning lily, while the specific name *pedunculatum* is from Latin *pedunculatus*, referring to the long flower stalk, or peduncle.

Generally, the seeds, that are round, fleshy and about 3-4cm in diameter, are dispersed by water, which accounts for the usual location of the lily by streams and estuaries. The seeds are described as being 'cotyledonary petiolate', that is, they produce a petiole for the first leaf before a root system is established.

Crushed material of *C. pedunculatum* has been used to treat stings of the Box Jellyfish in Northern Australia, but it is by no means a cure. It was also once used to make fishing lures; the thick stem was retted, or soaked in water to remove all the contents, leaving behind a pale coloured fibrous material. This was attached to the fishing line around the hook, and supposedly attracted fish such as mackerel.

Quite an interesting plant.



(Photo by Jennifer Liney)

Request from the Committee

by Jan Robilliard

Are you affiliated with any other groups with similar aims to the Australian Plants Society? The APS South East group committee would like to contact similar groups in our area, from Batemans Bay to Eden, to share ideas and explore the possibility of cooperating in field trips and other activities.

Also if you are aware of any events occurring in this region which may provide opportunities for APS SE Group members to be involved in or to use for raising awareness of our existence and programs please contact The Secretary, Mog Bremner, phone 0401 968899 or email mogbremner@mogajon.com.au

Thanks for your help with this.

Practising Pruning

by Leigh Murray

It seems to be taking me an inordinately long time to get the hang of pruning. I've been at it, enthusiastically, for years – and I'm still getting problems. I'm an incorrigible tip pruner, and I used to think that it was a good technique for just about everything. Now I'm not so sure.

My latest little difficulty is that *Eucalyptus leucoxylon* of all sizes seem to take umbrage at my pruning. If I pinch out a tip of a small plant, the plant sits there and looks at me, declining (at least for ages) to shoot new growth below the missing tip. And when our biggest *E. leucoxylon* at Tuross, which was about 5m tall at the time, was cut back some years ago to try to keep it to an easily-maintainable height, quite a number of branches died back. This really surprised me, because the pruning didn't seem to me to be particularly severe – we just cut each of the taller branches back to a point above active growth on that branch. Similar and somewhat harsher treatment of its neighbouring *E. lansdowneana* resulted in enthusiastic growth.

One thing I have learnt is that *Acacia fimbriata* adores frequent tip pruning. It loathes to be cut back hard, and will not re-shoot if cut below active growth. But a tip removed here and there on an on-going basis results in a beautifully bushy, attractively weeping shrub. It looks gorgeous. *A. covenyi*, on the other hand, can be cut back into bare, rock-hard wood, and it will usually shoot again from that. It's amazing.

The stunningly beautiful *Myoporum floribundum* has a reputation for not liking to be pruned at all. Yet I've never noticed any sulking after I've either tipped ours or cut back slightly harder. (I'm not saying it hasn't happened, just that I haven't noticed it. It took me a long long time to realise that my pruning technique was not appreciated by *E. leucoxylon*, so I might just be very slow to notice these things.)

One pruning lesson I've learnt is that *Lomandra longifolia* can be cut back very hard, and in fact, it seems to be beneficial to do this while they are establishing. Rabbits taught me that – they ate the plants back to almost ground level, and the plants thrived, doing much better than their un-eaten siblings.

So, as I prune, hopefully I learn. I do *try* to avoid upsetting our plants, but it seems I've got some way to go in learning how to do that.

The Family Tremandraceae

by John Knight

At the November meeting I referred to the Genus *Thomasia* as having moved from Sterculiaceae to Malvaceae. Botanists are certainly finding out so much more information about how our plants evolved using DNA techniques. As growers of Australian plants, we have to rely on what we see, the morphological characters of plants, the look and feel of foliage, and the arrangement of flowers etc, in determining what a plant is thought to be.

Scientists over the centuries have spent countless hours trying to work out the relationships of plants. The concept of Genus and species is attributed to Linnaeus, who adapted the known knowledge at his time, into an artificial system, using the arrangement and number of sexual characters of the flowers, such as the stamens and pistil (stigma, style and ovary). It was maybe assumed that the number of plant types was fixed and determined, but with the publication the Charles Darwin's "On the Origin of Species by Means of Natural Selection" in 1859, scientist began to challenge the thinking that species were fixed, immutable. Now came the new wave

of thinkers, espousing evolutionary (and to many, revolutionary) theories, that plants evolved over time into the plants we know today, but with often quite different looking parentage.

We accept that, with the knowledge of fossil records, incomplete as they are, that many modern plants were around a long time ago, and are happy to accept the work of botanists in sorting all the available evidence to produce a theoretical pattern of evolution. So we must accept that our use of morphological characters in determining what plant is what, and where it fits in the maze of nature, is at an end. We as growers of plants will never be able to test the theories and evidence produced using a myriad of genetic markers to prove or disprove present and past hypotheses as to classifying plants. But we must also not put our head in the sand, so to speak, and refuse to accept that some plants will and have been moved between families, or worse still had their name changed to something totally unexpected.

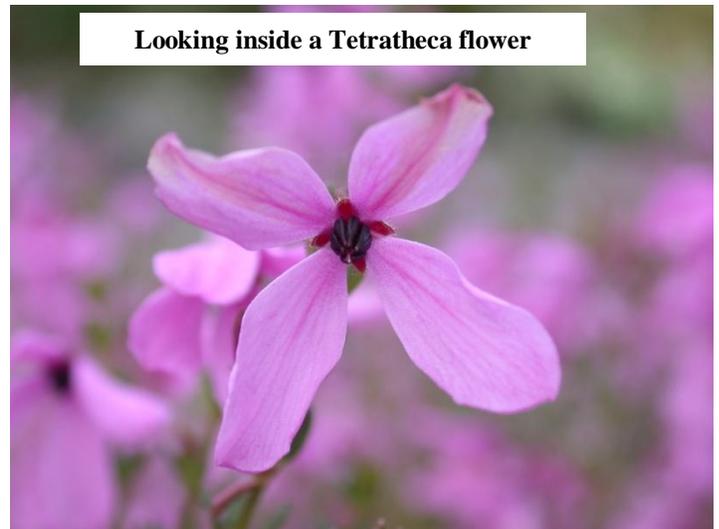
Many of us will at some time or other have grown one or more members of the small endemic Family Tremandraceae, which included *Tremandra*, comprising 2 species found in south west WA, *Platytheca*, also of 2 species from south west WA, and *Tetratheca*, a genus of about 50 species, plus a few as yet un-named species. *Tetrathecas* can found from South east Queensland, through eastern New South Wales, Victoria, Tasmania and south eastern South Australia, but the greatest variety and numbers of species occur in south west WA.

What is interesting to scientists about the Family Tremandraceae, is the apparent speed at which the species have diversified. Recent work using DNA and other modeling has proved the link to Elaeocarpaceae This might seem a little odd, for that little family contains little heathy shrubs, and we recognize plants in the Elaeocarpaceae as rainforest plants, including many large trees such as *Sloanea* and *Elaeocarpus*.

With rainforest roots, but having decided to compete for space in the drier sclerophyll environs, *Tremandra*, *Platytheca* and *Tetratheca* continued to diversify, with some species in more arid areas doing away almost entirely with leaves, and evolving a way of using the stems (cladodes) to undertake the important process of photosynthesis.

Most will be familiar at least with *Tetratheca*, so I will tell you a little of what I know about these gems. *Tetratheca* is derived from 'tetra' (four) and 'theca' (box or sac) and refers to the stamens, which are 4 celled or 4 lobed. Your 10x lens will give a good view when looking down on the stamens, for you will readily observe the box like structure, with terminal pores. Flowers have 4 – 5 petals and twice that number of stamens, and a single superior ovary and style. As mentioned the flowers are generally, but not always pendent, adapted to visits by insects. I have observed blue-banded bees and hover flies frequenting the flowers, but cannot confirm that they are pollinators, as my garden plants have not produced seed.

Tetratheca contains a range of small shrubs well suited to home gardens, and it is pity that few species are available. When I worked at Austraflorea Nursery in Melbourne in the 1980's there was 11 species available, and



they were fairly popular. Over time, as fewer people propagate their own plants, and purchase what is current in the nursery trade, some plants inevitably disappear, and it seems the time of *Tetratheca* had gone.

There is always a need for small plants to fill gaps, and for this *Tetratheca* is ideal. They are mostly dwarf to small shrubs, often with soft herbaceous foliage arising from a woody rootstock. Flowers of most species are pink to pinkish-purple, although some species have white flowered variants. Nearly all flower from late winter through spring, and the flowering can be very prolific. A few species will carry on flowering into summer, and pruning can assist in this. Scattered through a garden, they provide a unifying palette without being dominant. Plants do best when grown in company with other plants, and prefer something less than full sun. However they do require good drainage, and will suffer if the soil is wet around their roots. That said, they do appreciate a drink when the weather gets dry. (don't we all !) It has been said that plants can be short lived, and while this is obviously true of some species, others persist for many years. To grow these plants successfully, regular pruning of the old stems is important. Once a plant begins to make new shoots from ground level, it is safe to remove the old woody shoots, as one would for raspberries for example. Thus pruned the plants generally grow away strongly, preparing to produce another stunning display next season. Usually, for plants grown in open sunny sites, I would wait until the heat of summer is over, say mid March, before pruning heavily, as the older growth protects the young shoots. However, if your plant has finished flowering by October, and new growth has commenced, a pre-summer pruning is preferred. Although quite happy without supplementary feeding, a sprinkle of slow release fertilizer in early autumn will help produce strong growth and better flowering. A dusting of potash is also beneficial at this time.



Some species worth growing :

Tetratheca bauerifolia, so named for its leaves resemblance to *Bauera*, is a small spreading shrub, growing about 40cm high and a little wider. During spring and early summer the plant carries delightfully perfumed pink bells along the stems. These can be prolific if the season has been kind. It does best with some protection from other plants, and in its natural habitat of the tablelands of Victoria and NSW, is found in rocky heaths. Good drainage is necessary, and the plants will adapt to drying soils once established. Common name is Heath Pink Bells.

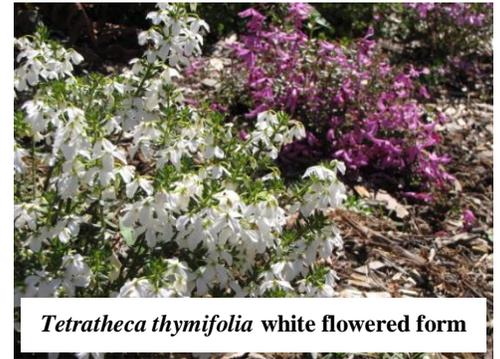
Tetratheca ciliata, Pink Bells, is a small shrub, but somewhat larger than the previous species, growing up to 1m tall and 50cm to 1m wide. Plants are often erect in habit. Ranging from the coast to ranges of the southern states, plants are more often associated with crowded understorey rather than open sites. Popular in cultivation, Pink Bells flowers heavily on erect or arching stems from late winter through spring. Colour ranges from pink through mauve to white. The specific name *ciliata* refers to the fringe of hairs on the leaves, although the stems are usually much hairier.

Similar in size is ***Tetratheca labillardierei***, a species found on the ranges of NSW, Victoria and Tasmania and distinguished by the glandular hairs on the stems, hence the common name of Glandular Pink Bells. Once a popular garden plant, it is now rarely seen, although when in flower from winter to mid summer it is an eye-catching species. Usually deep pink, white flowered variants have been grown.

One WA species which deserves a revival is ***Tetratheca setigera*** Bristly Pink Bells, which occurs naturally south from the Darling Ranges. It can grow up to 1m high but is mostly smaller, and although fairly tolerant of well-drained conditions, can suffer if allowed to dry out during flowering, which is during late winter through

spring. Be warned too that although the floral display is very prolific, the pollinators which this plant seeks to attract are lured by a less than attractive aroma.

Tetradthea thymifolia, Black-eyed Susan, is probably the best known species, and is widely available, although forms in the trade may not represent the best that this plant can offer. Some are vigorous, growing to 1m high and up to 1.5m wide, but the best to my mind are those smaller forms with pleasant arching stems and often larger flowers. Plants grow from southern Queensland and through the coastal ranges of NSW. The selection “**Bicentennial Belle**” was released in 1988 and has proved a reliable and long flowered plant, tolerating shaded or sunny sites. Flowers can appear at any season, especially after soaking rains, which stimulate a flush of growth.



Tetradthea thymifolia white flowered form

Species of *Tetradthea* are usually easy to propagate, using the young suckering shoots whilst still green. These usually produce roots fairly quickly, but the propagation mix must be well drained. The best time to propagate in my experience is from November to April, although patience will be rewarded if cuttings are taken at other times. If the plant from which you wish to propagate has not begun suckering, using the soft new growth on current years stems is also suitable. Cuttings do better if shaded from the heat of summer, and as many species have variably hairy foliage, it is wise to avoid heavy misting.

Hopefully those who are growing these pretty little plants will get propagating and spread the cheer. For those who would like to include some of these in your own garden, it is always worth seeking out those members of APS who have a little nursery out the back. You just might be lucky. I wonder if my luck might be in. If I had a wish it would be that someone is growing *Platytheca galioides*, (*syn P. verticillata*) This delightful WA plant was once widely grown, but I have not seen a plant for years, and so **Tremandraceae** is no more.

References:

Encyclopaedia of Australian Plants for cultivation, W R Elliot and D L Jones Vol 9 (2010)

A revision of the Genus *Tetradthea* (Tremandraceae) Joy Thompson 1976 National Herbarium of NSW

Save Our Flora

by Mog Bremner

In the last newsletter, Bob Ross told us about the new initiative ‘Save Our Flora’ to create a register of who is growing threatened and endangered species, that Maria Hitchcock in Armidale has started. One of the ideas of this is that APS members will be able to exchange plant material with people growing these plants, leading to more people growing them and increasing their chance of survival.

Some people have questioned what the legal situation for this exchange might be, so I asked Ryan Harris, the seed bank officer at the ERBG to tell me about the law in this area. He has gone into this in detail because the ERBG collects, grows and sells plants, some of which are threatened and endangered.

The legal situation is set out in the ‘Sustainable management plan 2013-2017 for the commercial harvest, salvage and propagation of protected whole plants’. This is a link to the document

<http://www.environment.nsw.gov.au/resources/wildlifelicences/20130001plantsmp.pdf>

The upshot is that if APS members are growing threatened and protected plants in their gardens, they can share material from those among themselves – AS LONG AS the original plant was obtained legally.

So for instance, if I buy a *Correa baeuerlenii* from the ERBG, it will have a label stating their grower's licence number. I keep that as a receipt to prove my legal acquisition of the plant. Then I grow it in my garden and propagate from it: these daughter plants can be legally shared with other APS members. However I could not sell these daughter plants at a local market because I don't have a grower's licence. Nor can I share the plants with non-APS members.

ERBG are legally allowed to sell me the original because they have a licence to collect material from National Parks and State Forests and Reserves. They can propagate from the collected plant and sell it to me because they have a grower's licence.

It is important to be aware of these rules because the penalties for not following them are severe, including very large fines and even possible imprisonment.

Landscaping with native plants

by Bernadette O'Leary

David Charlton, from Provincial Plants and Landscapes at Wandella has offered to spend time with our group talking about his landscaping business. (See <http://plantsandlandscapes.com.au/> for comprehensive information about Provincial). David has extensive experience in using native grasses in landscaping and regenerating sites.

The road to the Wandella property has a good bitumen or dirt surface but some of the final stretch is rough, so we will go in convoy in 4WD vehicles. **Meet at the Cobargo Catholic Church at 10 am.**

Because we need to organise vehicles and may need to contact people if the conditions preclude the visit (e.g. very heavy rain, fire weather), please **RSVP** to Bernadette O'Leary (0403 711927) by Monday 24 February if you will be attending.

To get there from the north or south, turn west just south of the Wilgo/Narira Creek bridge at the southern end of Cobargo township, into Wandella Road; the sign says Wandella and Wadbilliga NP. See **map**, and please note that the scale changes after the turning into Wandellow Road. Relevant distances are:

- Princes Highway corner to Catholic Church – 600 m
- Catholic Church to Yowrie/Wadbilliga NP corner (keep going ahead) – 6.2 km
- Yowrie/Wadbilliga NP corner to Wandellow Road (turn left) – 8.6 km
- Wandellow Road turn to concrete causeway – 600 m
- concrete causeway to nursery access road (turn right) – 6.9 km.

The total distance from the Catholic Church to the nursery is 22.3kms. The 'private driveway', shown on the map just before that turning is not obvious. The nursery access road, Myrtle Gully Road, may not be marked. (There was a green piece of material marking the corner, on the opposite side of the road, in early February).

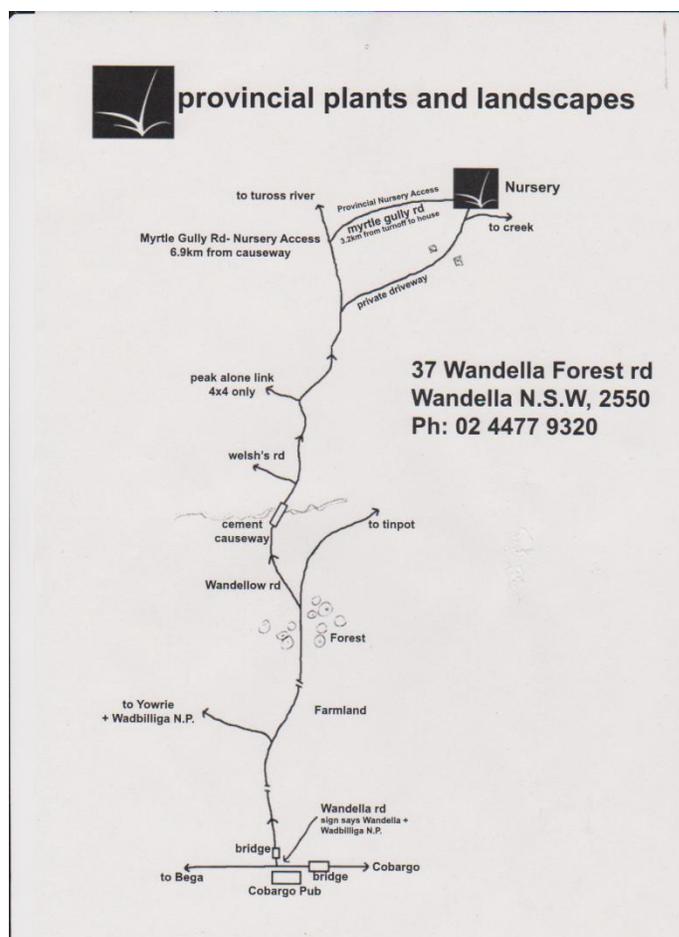
The day's activities as proposed are:

- morning tea on arrival
- a quick general meeting
- introduction to the site by David Charlton
- short presentation by John Knight
- short presentation by Sue Sullivan about growing kangaroo grass as lawn
- brief members' Show and Tell
- tour of the nursery site, and questions/answers as we go.

The site has some shelter and seating, water, tea/coffee making facilities and toilets. Please bring morning tea and your own lunch as well as coffee mug etc.

Please wear comfortable and sturdy shoes for walking on rough and undulating surfaces, and sun protection. Please note that mobile range is intermittent on site.

Hope to see you there. New members or guests of members are most welcome!



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MEMBERSHIP

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| Individual | \$50.00 | Concession | \$42.00 |
| Joint Members | \$58.00 | Concession | \$50.00 |

A concession is available to seniors, people on a limited fixed income and full-time students. This applies in joint memberships where one person is entitled to request it.

Please contact Jenny John for more information.