



Crowea exalata ssp magnifolia
image by Maria Hitchcock

Australian Plants Society Armidale & District Group

PO Box 735 Armidale NSW 2350

web: <http://www.aps-armidale.org.au>

e-mail: apsarmidale@gmail.com

Autumn Edition 2020



Correa mannii in garden setting

In this issue:	
Office bearers for 2020	1
Editorial	2
Gloucester weekend	3
Garden visits	5
Some laughs	7
Letter from ARC	9
Olearia elliptica	10
Arboretum working bees	11
Recent publications ex Botany UNE	12
For your Diary	20

Contact Us:

Armidale & District Group

PO Box 735, Armidale NSW 2350

President: Vacant

Vice President: Colin Wilson

Secretary: Penelope Sinclair Ph. 6771 5639

apsarmidale@gmail.com

Treasurer: Phil Rose Ph. 67753767

prosecarwell@bigpond.com

Membership: Phil Rose Ph. 67753767

prosecarwell@bigpond.com

Markets in the Mall, Outings, OHS & Environmental Officer and Arboretum Coordinator:

Patrick Laher Ph. 0427327719 patricklaher@yahoo.com.au

Newsletter Editor: John Nevin Ph. 67752128 jrnevin@nsw.chariot.net.au

Meet and Greet: Lee Horsley Ph. 0421381157 ghorsley@une.edu.au

Afternoon Tea: Deirdre Waters Ph. 67753754 deirdre@ipstar.com.au

From the Editor **John Nevin**

The past two or three years have featured catastrophes of biblical proportions reminiscent of the ten plagues of Egypt or the four horses of the Apocalypse. We began with a prolonged dry spell that evolved into one of the worst **droughts** in modern history. This was aggravated in the Uralla area by arsenic contamination of the town water supply brought about by low flows through granite rocks to the catchment dam. As a result, the NSW Government was supplying bottled water to the population for about four months while a carbon filtration system was installed to take the arsenic out of the water supply. So, we were on bottled water and trucking in domestic water with second daily showers and doing the laundry at a laundromat in town.

The drought culminated in **bushfires** that incinerated the tinder dry vegetation of much of the east coast. With the coming of *La Nina*, the drought broke, but with the prolonged low pressure systems off the east coast, we were drenched with metres of rain producing extensive **flooding**. A positive effect of the rain has been the recharge of ground water reserves and relief for the Murray-Darling river system as flood waters edge their way south to Lake Alexandrina.

To cap things off, there is now a **mice plague**. We thought that we were immune from this as the only mice that I had seen were two running away while I was mowing the grass. They were quickly snapped up by the trailing Butcher Bird for lunch. However, in the past fortnight, we have caught fifty of them in the house.

While all of this has been going on, we have had the **COVID-19 epidemic** with its lockdowns, travel restrictions, social isolation and cancellation of many of our usual activities. Unlike the deaths and disaster that we have witnessed in overseas countries, good management in Australia has left us in pretty good shape compared to the rest of the world. The only hiccup now is the availability of vaccine as we seek to immunise our population in order to return to a more normal routine. I suspect that it will be late 2021 or into 2022 before we are at that stage.

Apart from the health effects of the pandemic, the economic effect has been dramatic around the world. We have had our first **economic recession** in twenty years with many

people losing their jobs or livelihoods. Again, good management using Keynesian pump priming and money printing, our economy is bouncing back and it looks like much of the feared effects will be limited. However, we will have a huge debt to pay off in coming decades.

The pandemic has greatly affected our group's activities. We cancelled our monthly meetings as we found that Zoom was no substitute for pressing the flesh. The drought with its attendant water restrictions, the latter which have only recently eased, led to the cancellation of our monthly stall and plant sales. Garden visits and bush walks have continued but on a smaller scale.

One of the beneficial effects of the COVID-19 isolation has been a revival of interest in gardening by many. Plant wholesalers have been struggling to keep up with the demand for plants. In our case, after a year of despondency with the drought, optimism has returned and we have taken the opportunity to repair the drought damage, remove many exotic and native plants that had died, planted those species that had proved themselves to be drought tolerant, and caught up (not yet!) on a backlog of weeding and mulching.

The group has started to crank up activities again with more regular garden visits, recommencing the monthly market stalls and plant sales, and planning for a large public meeting in October about drought hardiness planting with Attila Kapitany our guest speaker.

Due to the continued working bees over the year, the Arboretum is looking good despite the level 5 water restrictions that have only just eased. A special thank you to Colin Wilson for loading his wagon with bore water from his property at Uralla each month to sustain our existing plantings and to carry out more.

So, as we go into winter, the drought is over, the economy recovering, COVID-19 under control and universal vaccination in sight, we can look forward to a bumper spring and better times ahead. Happy planting!

Weekend at Gloucester and Barrington Tops

by John Nevin

We were planning a trip to Gloucester in late March to be based at Gloucester and explore Gloucester Tops and Barrington National Park. I enjoyed a few days there exploring the various walks and assessing the best ones to experience on our visit. The area is quite beautiful with plants probably able to be grown in our area as the altitude and weather is somewhat similar to that of Armidale, albeit a bit wetter and colder.

As it turned out, a deep low weather system parked itself off the east coast and dumped record amounts of rain leading to extensive flooding. As a result, we called the trip off a few

days before we were due to go. A dozen people had expressed interest. It was just as well as the Gloucester River broke its banks and flooded Gloucester and it would have been difficult to get through without the added discomfort of heavy rain and cold.

Perhaps we can reschedule the trip for spring or a warmer time of year when the elements might be kinder to us.



The road into Gloucester at the approach to the roundabout to access the main street. This was on the Friday night we were due to book into our motels there and have a meal together.



The road at northern end of Gloucester where the bridge crosses the Gloucester River to access the town. This was taken on the Friday night that we were due to book into our accommodation at Gloucester.



Water over the road on the northern approach to Gloucester on the Friday night for our trip.

APS Armidale Garden Visits 17th April 2021 by Eric Sinclair

These visits took place in persistent and, sometimes heavy rain. Participants (16) became colder and wetter as the day went on, as the maximum for the day was only around 12 degrees Centigrade. Photos (taken on a phone) were few due to the prevailing conditions!

The first stop for the afternoon was at Colin Wilson's at Arding. This is a good sized block set in paddocks. Colin took us around the various garden beds, showing us an amazing number of different species – both his successes and those that have been 'experimental'. Colin says the block is wet, and it certainly was on this day. There was a good stream flowing past the line of River Oaks on Colin's boundary. He says that he has been able to grow many more species since mounding his beds. Some *Correas* were in flower, also *Callistemons*, including *C. subulatus*; many of his shrubs were covered in a mass of buds ready to make a great display in Spring.

We saw many little birds – not surprising in this rural setting with so many different native species present. The photos below show discussion around



one of the raised beds, and also the magnificent line of Casuarinas, *Casuarina cunninghami*, along the boundary.

The next stop was at Liz and Bruce Gardiners at Uralla. This is a much larger garden, and still in the establishment phase. They have been planting this 10 acre property, which they have shared with their son Andrew and his family, for the past two years. It was also raining persistently, but this did not deter the gathering who enjoyed seeing the wide diversity and abundance of native species laid out in beds and the existing woodland.

Of particular note were *Eremophila mackinlayi* and a red *Callistemon sp.* flowering in the beds. There was a range of unusual or rare species eg. *Pittosporum angustifolium*, *Pimelea venosa*, and the groups of developing Acacias, Eucalypts and Hakeas in the outer windbreaks.

This property is a magnificent project and will take and receive much loving care. We look forward to another visit in the future to see how it is developing. It will be a very valuable environmental resource for plants, birds, and animals.

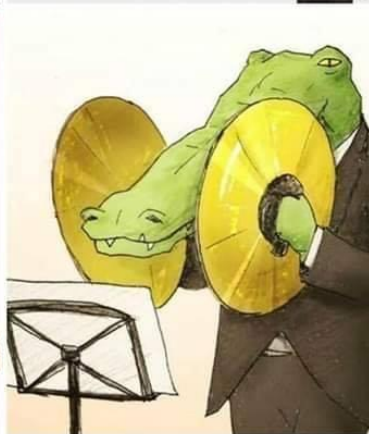
The photos show a broad view, and then a gathering at one of the beds where Phil Rose is explaining the identification methods for *Casuarina* species.

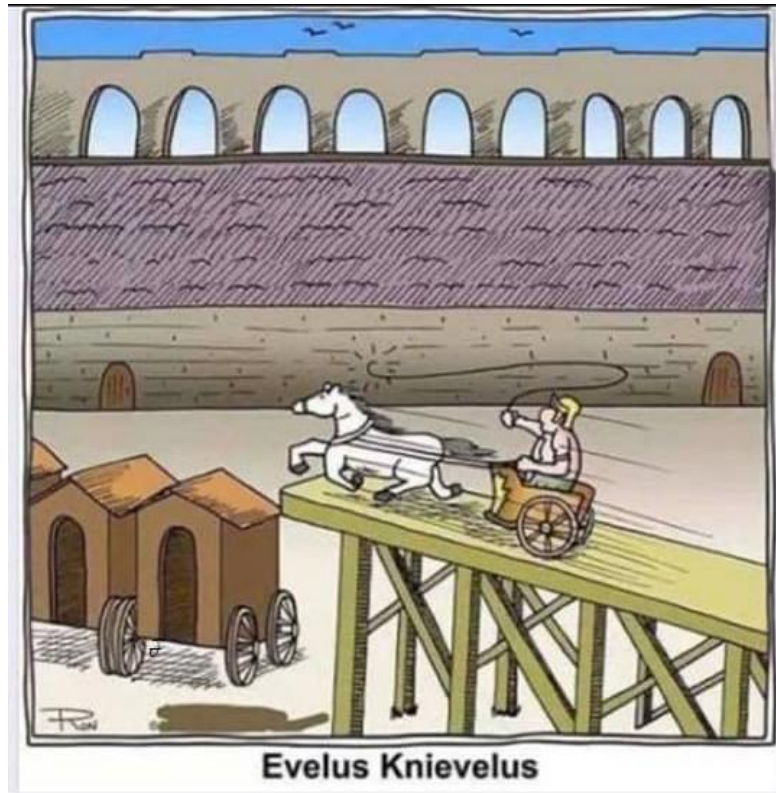


(*Pimelea venosa* is growing well here. It is a very rare plant recently rediscovered at Bolivia Hill after being thought to be extinct. There is a recovery plan for it being carried out there. Editor)

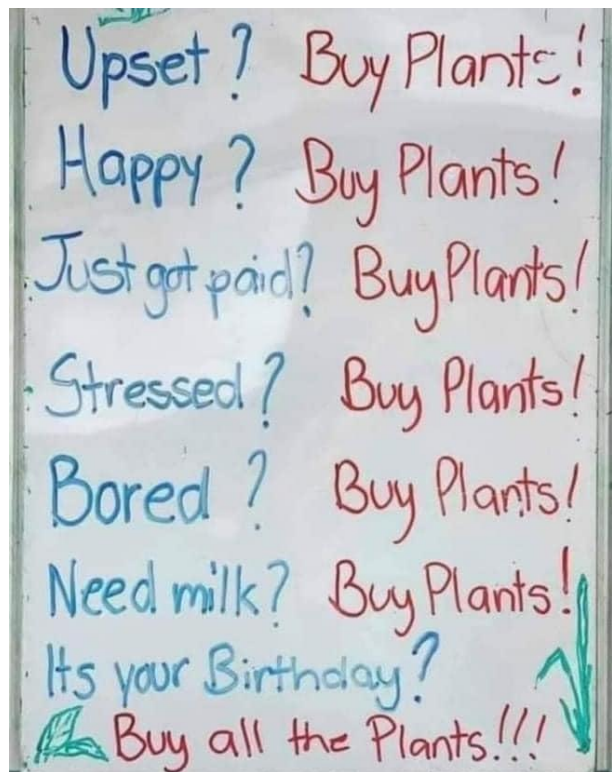
Some laughs

Why You
Don't See
Crocodiles
In The
Orchestra





When a nurse takes up gardening



Letter from ARC by Patrick Laher

The following letter has been received from Armidale Regional Council thanking the group for their work in the Arboretum



18th February 2021

Your ref:

Our ref: AO/2021/01443

Armidale & District Australian Plant Society
PO Box 735
Armidale NSW 2350

Dear Patrick

ARMIDALE BI-CENTENNIAL ARBORETUM ANNUAL REPORT 2019-2020

Thank you for your Annual Report for 2020.

I would sincerely like to thank the Armidale and District Australian Plants Society for the hours of hard work that the volunteer members have committed to the Arboretum during this very dry year.

It has been a contrasting year for climate and vegetation in the region. The good rainfall was very welcome in early 2020 which saw vegetation respond quickly and people's spirits lift. The importance of sites such as the Arboretum to people's wellbeing cannot be understated. Certainly the work that your volunteers undertake is of great value to the community as a whole.

Thank you again for your support throughout last year and I look forward to the opportunities that 2021 will provide.

Please contact me on (02) 67703983 or by email at rsingle@armidale.nsw.gov.au if I can be of further assistance.

Yours sincerely

A handwritten signature in black ink, appearing to read "R Single".

Richard Single
Project Officer Public and Town Spaces

Olearia elliptica

by John Nevin

In an earlier edition of the newsletter, I referred to a paper in *Austrobaileya*, which dealt with a revision of *Olearia elliptica*. This showed that what has been called this differs between the coast and inland. A R Bean, who wrote the paper, gave them new names, with the inland one now called *Olearia fulgens*, and the coastal one retaining the name *Olearia elliptica*.

Ian Telford has drawn my attention to another paper that has done an extensive study of the genus *Olearia*. As a result, this genus has now been split up into many different genera.

Olearia fulgens, our local plant, is now called ***Phaseolaria fulgens***.



This is an herbarium specimen of our local plant that is now called ***Phaseolaria fulgens***.

Arboretum Working Bees Jan-April 2021

by Patrick Laher

It was an interesting start to the year, with a cool and mild summer. But then, this was followed up in March with an extraordinary flooding event, especially for coastal NSW and the Sydney Basin. We were largely unaffected by the flooding event here on the Tablelands, but it did cause plant deaths at the Arboretum, especially to the *Prostantheras* (planted in November) and WA Mallee Eucalypts planted beside the paths radiating out from our garden beds.

However, as I write this report, the Arboretum is looking as good as I have ever seen it, with the *Lomandra* in particular putting on a tremendous growth spurt. All plants in the beds are also looking fresh and lovely. This all helps us to enjoy our working bees. Another enjoyable factor at the working bees is the number of volunteers contributing to them. Well done members and supporters!!! Our first working bee in February consisted of spraying, pruning and removing dead material. Since then, we have concentrated on planting beside paths and in garden beds. The level of difficulty in digging plant holes has been quite noticeable between March (nice and moist) and April (hard and dryer).

We have planted a range of attractive species, from Mallee Eucalypts, such as *Eucalyptus albopurpurea* 'Purple Patch', *pulverulenta* 'Baby Blue', *pleurocarpa* and *pimpiniana*. Banksias haven't been forgotten with *Banksia brownii*, *conferta* and *media*. Low growing *Micromyrtus ciliata* and *Templetonia retusa* have been planted close to the edge of beds where they can be seen and are free from the competition of large trees and shrubs.

Grevilleas generally do not grow well in the rich, high phosphorous black basalt soil, but I thought that I would try a hybrid that has been around for forty odd years. I remember this *Grevillea* when I first became addicted to Australian plants. *Grevillea* 'Red Hooks' is a large shrub with nice divided foliage and red toothbrush flowers. I know that John Nevin would be pleased that we have also planted *Phebalium ambiens* from Torrington and *Leionema elatius* from Donnybrook.

Thanks to the following members and supporters for their help: Liisa Atherton, Phil Rose, John and Barbara Nevin, Greg Horsley, Colin Wilson, Penelope and Eric Sinclair, Deirdre Waters, Keren McClelland, Peter Shepherd and Geoff Derrin

Some Recent Publications ex Botany UNE by John Nevin

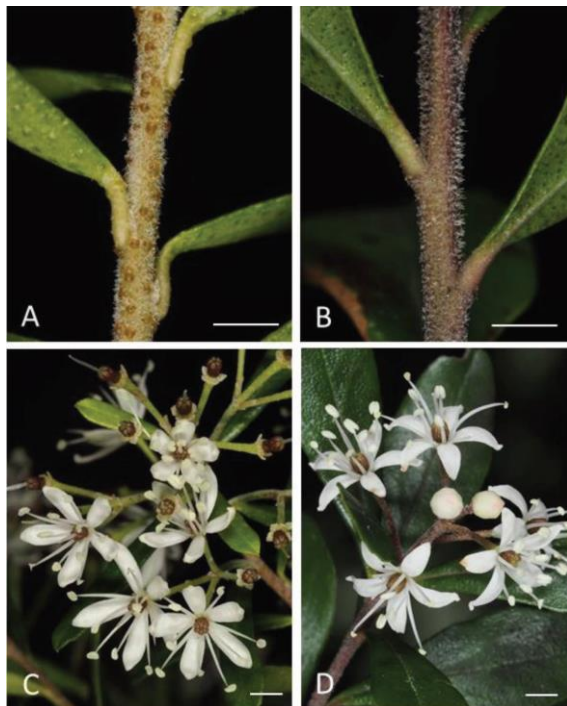
In recent months, there has been quite a few publications emanating from the Botany Department at the University of New England. I thought that I might summarise some of them and give a reference to them so that those interested may read the actual papers.

1. *Leionema elatius*

Up until this paper, *Leionema elatius* was thought to have two subspecies viz. *Leionema elatius ssp. elatius* and *Leionema elatius ssp. beckleri*. Telford and Bruhl have looked at this group and concluded that the specimen from Donnybrook is likely the type specimen for *Leionema elatius* and seems to be found only at that site.

Leionema elatius ssp. beckleri on the otherhand is fairly widespread through the coastal areas of Northern NSW and SE Qld and although it has a lot of variation in leaf size and shape, it seems to be a variation of the same plant.

Telford and Bruhl have proposed that both subspecies are not of the same species but each should be elevated to species level thus giving us *Leionema elatius* and *Leionema beckleri*. Some of the features of the plants are reproduced below from the paper.



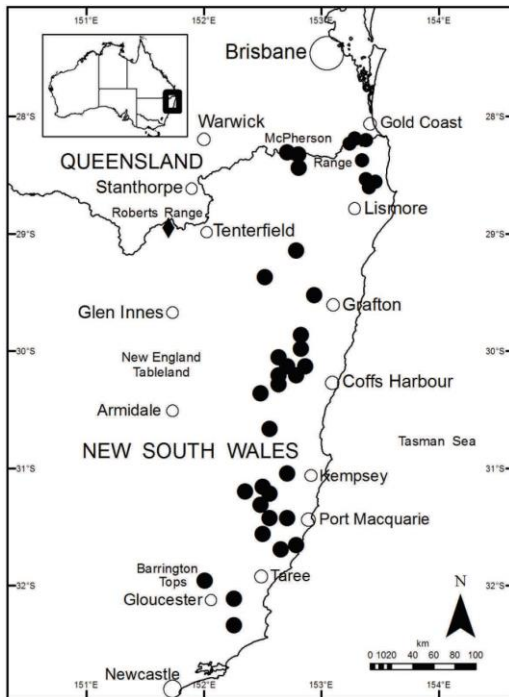
Branchlets and flowers of *Leionema elatius*
and *Leionema beckleri*

A, C *elatius* (from Telford & Rose 13518)

B, D *beckleri* (from Telford 13529)

Scale bars – 2 mm.

Images by JJ Bruhl



Distributions of
Leionema elatius ◆
Leionema beckleri ●

Based on Australian Virtual Herbarium data (avh.chah.org.au; accessed 2 Oct 2020)

Reference: Telopea - Journal of Plant Systematics

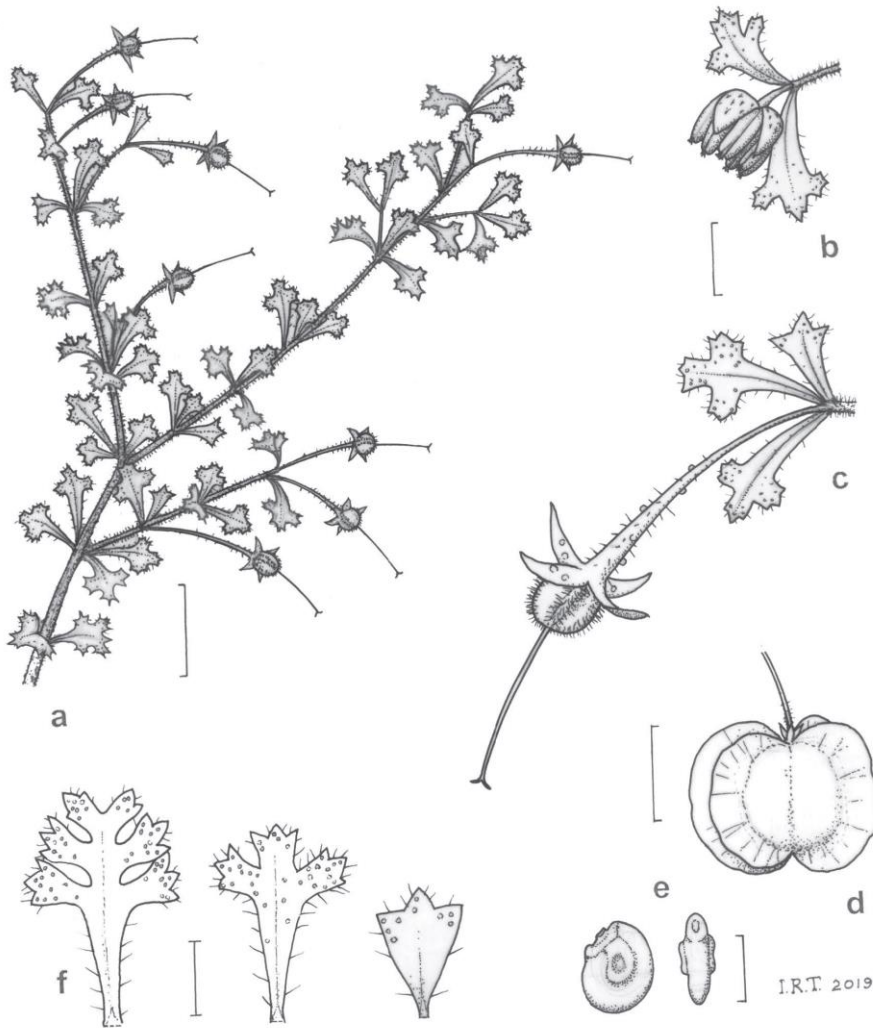
16 December 2020 Volume 23 p 197-203

2. *Dodonaea crucifolia*

Telford and Bruhl have described a new species of *Dodonaea* from the Grafton area. This species has previously been lumped in with *Dodonaea hirsuta* that grows in the granite belt including Torrington. We have seen this species when exploring the Torrington State Conservation Area.

Dodonaea crucifolia is limited in its geographic distribution to the Coaldale, Copmanhurst and Glenreagh areas around Grafton. It is a dioecious shrub growing to two metres. It has gained its name because of the leaf shape with them having 3 or 5 lobes with the lobes typically 3-toothed and the margin is not recurved (unlike *D. hirsuta*).

Those who went on the APS gathering at Coffs Harbour and took advantage of the visit to Gwen and Geoff Clarke's property would have seen it there, albeit it was not yet published as a new species.



Dodonaea crucifolia

- A. Leafy branchlet
- B. Male flower
- C. Female flower
- D. Fruit
- E. Seeds
- F. Leaf variation

Scale bars:

A.D = 10 mm

B.C.F.E = 2 mm

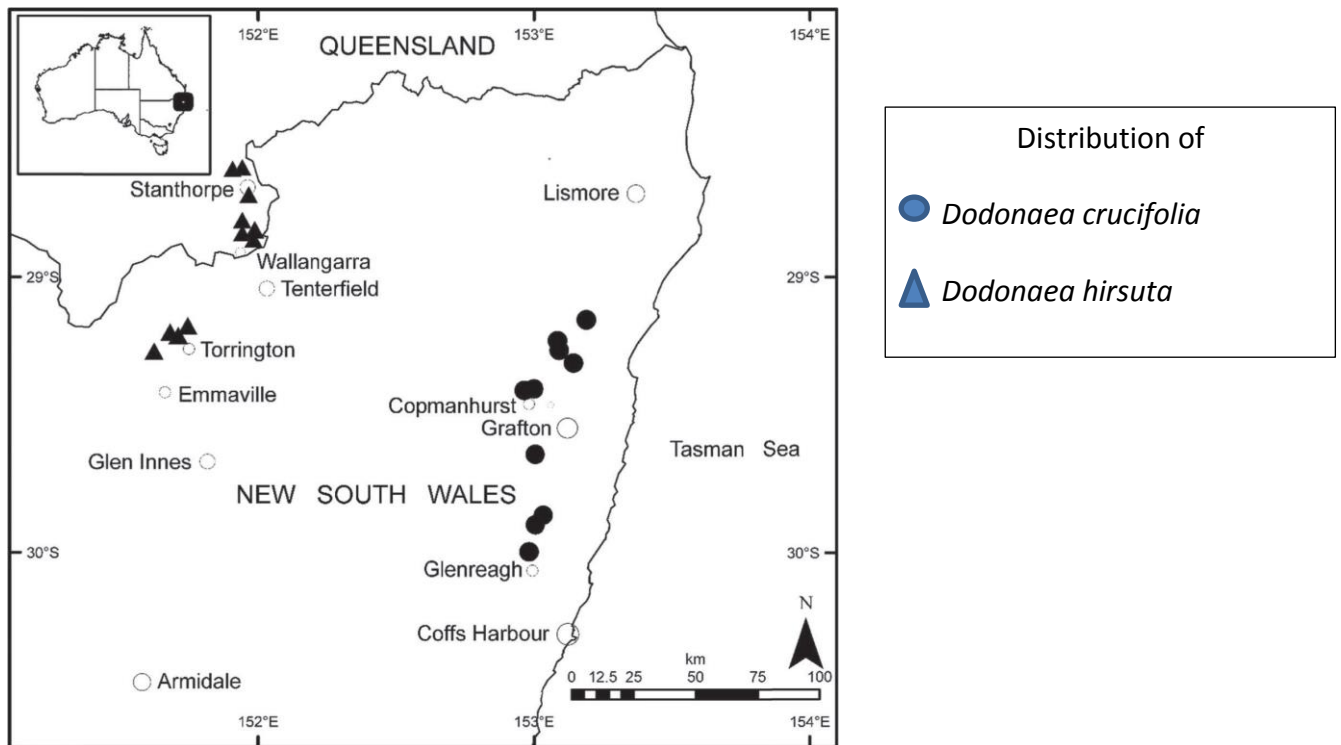


Dodonaea crucifolia

fruiting stem

Scale bar = 10 mm

Image by JJ Bruhl



Reference: Telopea – Journal of Plant Systematics
Volume 3 4th September 2020 p 119-125

3. Two new species of *Melichrus* named

One of the PhD students carrying out a revision of *Melichrus* has published her first paper and named two new species of *Melichrus* that were previously known by their locality names. John Williams had originally collected the two new species of *Melichrus* in 1965 and 1997 and these had been known as *Melichrus hirsutus* 'Newfoundland State Forest' and *Melichrus* sp. 'Gibberagee'.

Melichrus hirsutus is somewhat similar to *Melichrus procumbens* but differs in having stems ascending (v. decumbent), hairy branchlets (v. non hairy), leaf apex pungent (v. non-pungent), leaf margin and abaxial surface densely hairy (v. scattered – few hairs) and corolla cup-shaped (v. rotate). This plant grows in six known localities near Grafton. It is 0.2-0.7 m tall and flowers are solitary, axillary and red.

One of the problems with *Melichrus*, yet to be solved, is how to grow them as cuttings and seeds seem impossible



Melichrus hirsutus A. habitat; dry sclerophyll forest at Flaggy Creek Nature Reserve

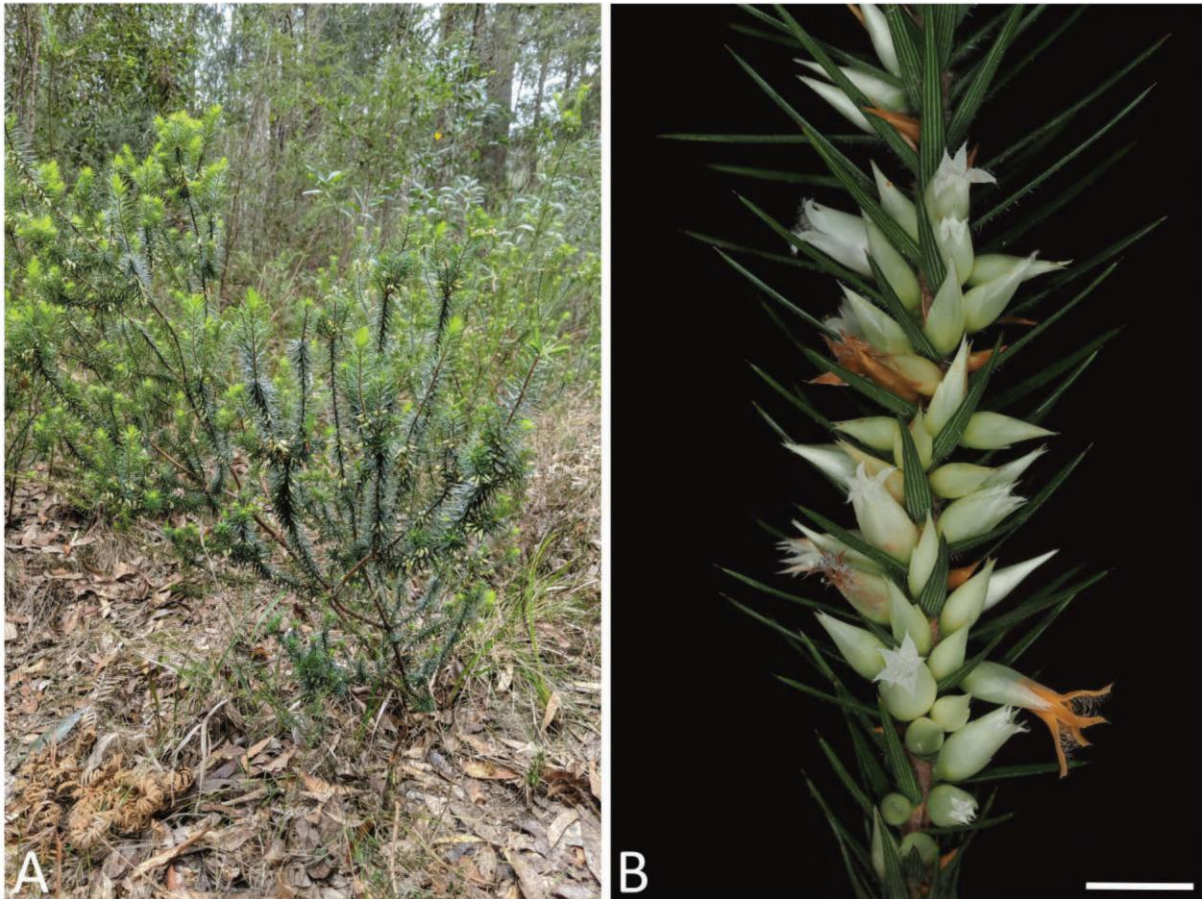
B. Fertile stem. Scale = 2 mm. Images JJ Bruhl

Melichrus gibberagee is very much like *Melichrus urceolatus*, but differs in having a rhizomatous growth (v. non rhizomatous), branchlets hairy, with fruit broadly ellipsoid (v. obloid). The plant grows from 0.2 to 1.5 m tall and the leaves ascend and are spreading. Flowers are axillary and coloured cream to green. The plant is localised to the Gibbberagee area south of Casino and the population covers an area less than fifteen square kilometres.

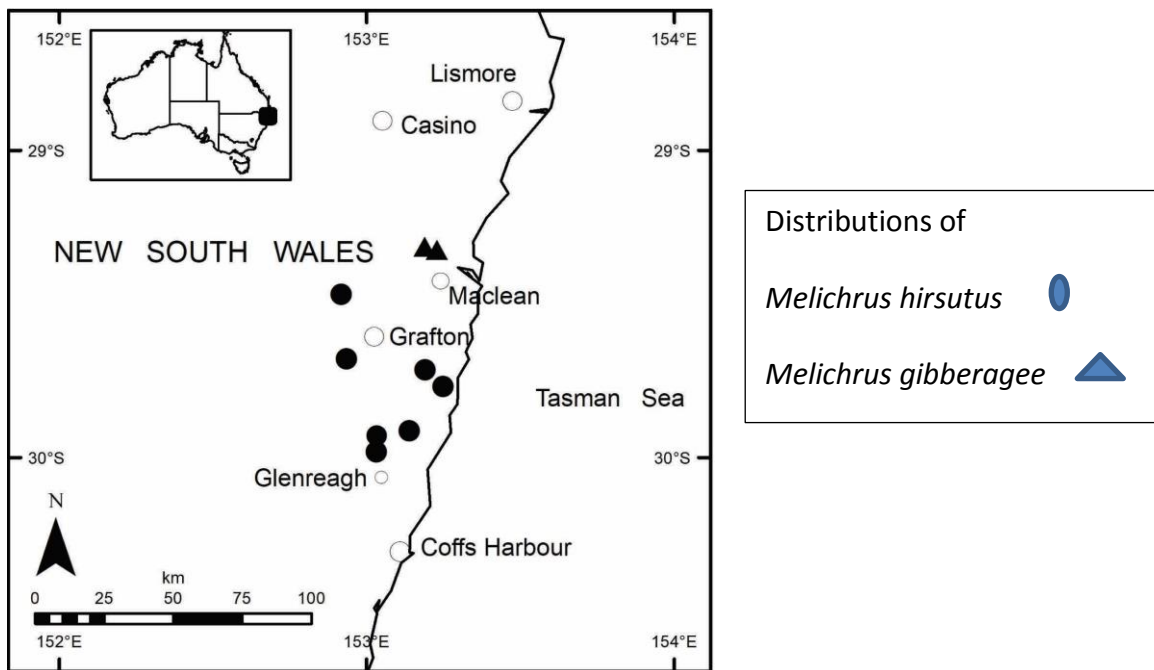
Because of the narrow distribution, it can be considered endangered. A large number of plants adjacent to the State Forest and on private land were found in recent times and these are protected under a conservation stewardship agreement with the owner.



Melichrus gibberagee
Isotype NE 1092335
Location deliberately obscured to protect the plant from predation.



Melichrus gibberagee A. habitat; layered open forest at the type locality
B. Fertile stem. Scale = 10 mm. Images H.T. Kennedy



These Papers can be read in full as follows:

1. Morphological data indicate the subspecies of *Leionema elatius* (Rutaceae) are not conspecific and both should be treated as species.
Ian R H Telford and Jeremy J Bruhl

Telopea – Journal of Plant Systematics
16 December 2020 Vol 23 p192-203

2. *Dodoniaea crucifolia* (Sapindaceae, Dodonaeoides), a new species from north-eastern New South Wales, Australia.
Ian R H Telford and Jeremy J Bruhl

Telopea – Journal of Plant Systematics
4 September 2020 Vol 23 p 119-125

3. Validation of two informally named species of *Melichrus* (Ericaceae: Epacridoideae) from north-eastern New South Wales
Helen Kennedy, Ian R H Telford, Darren M Crayn, Jeremy J Bruhl

Telopea – Journal of Plant Systematics
15 December 2020 Vol 23 p 187-196

FOR YOUR DIARY

May **Friday 28th** Arboretum working bee at 9 am
 Sunday 30th Markets in the Mall 8 am – 1 pm

June **Sunday 20th** Garden visit to Pat Laher at Uralla at 10.30 am
 This will be followed by the Solstice Luncheon at the Top Pub
 At 12 midday
 Friday 25th Arboretum Working Bee at 9 am
 Sunday 27th Markets in the Mall 8 am – 1 pm

July **Sunday 25th** Markets in the Mall 8 am – 1 pm
 Friday 30th Arboretum Working Bee 9 am

August **Saturday 21st** Garden visits to two Armidale gardens commencing

At the Horsley garden at 10 am followed by a visit to the
Shepherd's place next door

Friday 27th Arboretum Working Bee 9 am

Sunday 29th Markets in the Mall 8 am – 1 pm Wattle Day Lunch to
Follow at the Wicklow Hotel at 1 pm

September Friday 24th Arboretum Working Bee 9 am

Sunday 26th Markets in the Mall 8 am – 1 pm

October Saturday 9th Special Public Forum 1 pm – 5 pm at Armidale
Bowling Club. Guest speaker **Attila Kapitany** will talk on
“Australian Succulents and Drought Hardy Plants”

Friday 29th Arboretum Working Bee 9 am

Sunday 31st Markets in the Mall 8 am – 1 pm

November Saturday 20th Annual General Meeting and end of year activity
With a garden visit to the Nevins at 2 pm

December Friday 10th Planning Meeting for 2022 at the Armidale Tree
Group
