



TRILEPIDEA

Newsletter of the New Zealand Plant Conservation Network

No. 179

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Deadline for next issue:
Thursday 15 November 2018

SUBMIT AN ARTICLE TO THE NEWSLETTER

Contributions are welcome to the newsletter at any time. The closing date for articles for each issue is approximately the 15th of each month.

Articles may be edited and used in the newsletter and/or on the website news page.

The Network will publish almost any article about plants and plant conservation with a particular focus on the plant life of New Zealand and Oceania.

Please send news items or event information to events@nzpcn.org.nz

Postal address:
c/- 160 Wilton Road
Wilton
Wellington 6012
NEW ZEALAND

PLANT OF THE MONTH, p. 2



Alseuosmia macrophylla.
Photo:
Rowan Hindmarsh-Walls.

NZPCN Annual General Meeting

The Network's AGM will be held in Wellington at 6.00 p.m. on Tuesday 6 November at the Wellington Botanic Gardens Treehouse, 101 Glenmore St, Thorndon (or enter via the Met Office at 30 Salamanca Rd (Salamanca is the best option for taxi drop offs)). The meeting will be followed by a presentation from Karin van der Walt titled 'Ex situ conservation of Myrtaceae, a response to Myrtle Rust in the Pacific Region.' The abstract of the talk is given below. There will be refreshments available. Public parking is available on Glenmore Street; there is no parking available at the Treehouse.

If any member has matters that they wish to discuss at the AGM, they are requested to inform the secretary, Matt Ward (mattward@gmail.com) before the meeting.

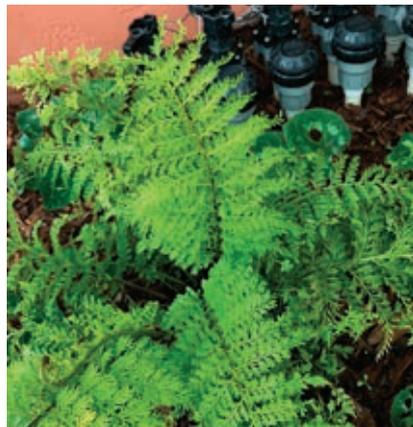
Abstract for talk: *Ex situ* conservation of Myrtaceae, a response to myrtle rust in the Pacific Region

Karin van der Walt, Otari Native Botanic Garden (Karin.Vanderwalt@wcc.govt.nz)

The discovery of myrtle rust (*Austropuccinia psidii*), in New Zealand in May 2017, resulted in all native New Zealand Myrtaceae species being listed as Threatened. Since *A. psidii* is a new pathogen in New Zealand ecosystems, the exact impact at the species, community and landscape level is not known although global studies reveal significant impacts. Formerly widespread genera such as *Rhodamnia* and *Rhodomyrtus* in Australia are now facing extinction in the next five years because of tree mortality and reproduction failure following the establishment of myrtle rust. With limited control options for this wind borne pathogen, one of the most important actions involves the creation of genetically diverse *ex situ* germplasm collections. Although seed of some genera such as *Metrosideros*, *Leptospermum* and *Kunzea* can be effectively stored using conventional seed banking methods, other species including *Metrosideros bartlettii*, *Syzygium maire*, *Lophomyrtus* spp. and *Neomyrtus* spp. require more research because of low/no seed production and seed characteristics. Our work is focussing on seed characteristics and cryopreservation of *Syzygium maire*, hand pollination of *M. bartlettii* and establishing additional back up collections through tissue culture.

New Zealand flora overseas

The latest examples come from member Allison Knight who has photographed New Zealand plants in San Diego.



Asplenium bulbiferum in San Diego.



Mānuka in San Diego.

PLANT OF THE MONTH – *ALSEUOSMIA MACROPHYLLA*



Alseuosmia macrophylla.

Photo: Rowan Hindmarsh-Walls.

The plant of the month for October is karapapa, *Alseuosmia macrophylla*, one of five species of *Alseuosmia* found in the New Zealand region. The species is found throughout the forested areas of the North Island, except the volcanic plateau, and only in North-West Nelson in the South Island. The species is a forest dweller of low to mid altitude areas, favouring fertile humus rich soils of the forest floor and can tolerate fairly deep shade. It is generally seen as a moderate sized shrub with no distinct trunk, but can reach up to 5 m tall. The alternate leaves are generally large and very glossy with shallow teeth along their margins. The leaves can be very variable in shape and size. The red to pink to white tubular flowers have frilly edged petals and are borne in the leaf axils. They have a strong pleasant scent and contain nectar, so are probably pollinated by both moths and birds. The bright orange fruits are dispersed by birds.

The species is most similar to *Alseuosmia turneri* and *A. quercifolia* but can be distinguished from both of these two species by its much larger flowers (30 mm compared with approximately 10 mm). *Alseuosmia. quercifolia* is found only in the northern third of the North Island and *A. turneri* is found only in the North Island volcanic plateau where it replaces *A. macrophylla*. The species is endemic to New Zealand and is currently listed as Not Threatened because it is still fairly widespread, but it is quite palatable, and it is often heavily browsed by ungulates and possums, so its abundance in the shrub tier could potentially be used as an indicator of browse pressure.

Alseuosmia is an endemic New Zealand genus. The family Alseuosmiaceae is small and relatively unknown, including only five genera and approximately 11 species scattered across Australia, New Caledonia and New Zealand. The generic name *Alseuosmia* apparently means 'perfume grove', likely referring to the species' strongly scented flowers; the species epithet *macrophylla* means 'big leaf' referring to the species large leaves.

You can view the NZPCN website factsheet for *Alseuosmia macrophylla* at: http://www.nzpcn.org.nz/flora_details.aspx?ID=1488

Back to basics—Native Only!

Matt Ward, NZPCN Secretary (mattwardward@gmail.com)

During November 2018 Vote for your 'Favourite New Zealand Native Plant'

This year, the NZPCN Council members decided that enough is enough: "Do we really need to vote for our 'Least Favourite Weed?'" NO WE DON'T. Therefore, this year's poll will be only for "New Zealand's Favourite Native Plant".

Voting will commence as usual on 1 November and continue throughout November 2018, giving you plenty of time to make your selection. As has always been the case, the more the merrier; you are welcome to get as many people as you know to vote. They just need to have an email address. The magical voting button will appear on the website's Home Page (www.nzpcn.org.nz) and each species fact sheet page, allowing you to choose how you wish to vote. When you press the button, you will be

prompted through easy steps to cast your vote. Please also find the time to leave a comment relating to your choice; these are often great to read and generally provide insightful passionate views in relation to people's love of the special native species present in New Zealand.

Despite the NZPCN being a relatively small volunteer organisation, your votes matter. Since winning an annual NZPCN Favourite NZ Plant, at least two winners have received extra attention towards their conservation; we would like to think it was thanks to your votes. To recap, the winners since the poll began in 2002 are given below. There are a couple of inexplicable gaps.

2002 – The iconic *Metrosideros excelsa*, pohutukawa

2003 – The iconic *Metrosideros excelsa*, pohutukawa

2005 The 'Threatened—Nationally Endangered' *Lepidium oleraceum*, nau, Cook's scurvy grass

2006 The 'Threatened—Nationally Vulnerable' *Brachyglottis huntii*, rautini, Chatham Island Christmas tree

2007 *Epilobium microphyllum*, willow herb (really?)

2009 The 'At Risk—Declining' *Ficinia spiralis*, pingao, pikao, golden sand sedge

2010 The 'Threatened—Nationally Vulnerable' *Myosotidium hortensia*, kopakopa, kopukapuka, Chatham Island forget-me-not

2011 The 'At Risk—Relict' *Sporadanthus ferrugineus*, bamboo rush, giant wire rush

2012 The iconic *Agathis australis*, kauri

2013 The unusual, yet stunning *Hymenophyllum malingii*, filmy fern

2014 The 'Threatened—Nationally Critical' *Metrosideros bartlettii*, rata moehau, Bartlett's rata

2015 The 'At Risk—Naturally Uncommon' *Pleurophyllum speciosum*, giant emperor daisy

2016 The 'Threatened—Nationally Critical' *Metrosideros bartlettii*, rata moehau, Bartlett's rata

2017 The 'Threatened—Nationally Vulnerable' *Dactylanthus taylorii*, pua o te reinga, wood rose, flower of Hades

With a couple of exceptions, the past winners show we like to highlight the flora we know, so when you find or see them you can say, "this is a rare and endangered species", a sentiment which is both amazing and sometimes unfortunate.

Polling is underway soon, so make your choice for something worthy of acknowledgement for whatever reason. Voting takes only a few minutes so rope in all your colleagues, neighbours, relatives, and friends. All they need is an email address to vote and an opinion about a favourite New Zealand plant; it's that simple. Our flora presently has little protection and needs more acknowledgement, have your say with a comment. Who knows what species will take the title for 2018? Only time will tell.



Metrosideros bartlettii—the 2014 and 2016 winner in flower, in cultivation. Photo: Philip Smith.



Kauri—*Agathis australis* 2012 winner; New Zealand's best known giant, Tane Mahuta god of the forest residing in Waipoua Forest, Northland. Photo: John Sawyer.

EVENTS

If you have important events or news that you would like publicised via this newsletter please e-mail the Network (events@nzpcn.org.nz):

12th Australian Plant Conservation Conference

APCC12: Centre for Australian National Biodiversity Research (CANBR) at CSIRO. **Venue:** CSIRO Discovery at the Black Mountain Science and Innovation Park, Canberra. **Date:** 12–16 Nov 2018.

- presentations on the latest findings relevant to plant conservation and native vegetation rehabilitation
 - practical workshops on ecologically sound techniques
 - field trips demonstrating plant conservation in action
 - social activities to enhance networking.
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Programme: [available here](#)

More details: www.anpc.asn.au/conferences/2018.

John Child Annual Bryophyte and Lichen Workshop

Date: 8–13 November. **Venue:** Pureora Forest Lodge. Open to anyone and everyone with an interest in the mosses, liverworts, and lichens of New Zealand, from beginner to expert. **Accommodation:** Pureora Forest Lodge (<http://www.pureoraforestlodge.org.nz/facilities.html>), other possibilities at Pureora and in the surrounding area. **Bring:** all necessary field gear. **Cost:** approximately \$300. **Tom Moss Award:** open to any student studying any aspect of Australasian bryophytes and/or lichens; see <http://www.wellingtonbotsoc.org.nz/awards/moss.html> for details.

Organisers: Thomas Emmitt, email: temmitt@doc.govt.nz, and Dhahara Ranatunga, email: dranatunga@aucklandmuseum.com. **Estimate of numbers:** If you are interested in attending the workshop this year, please email Dhahara Ranatunga (dranatunga@aucklandmuseum.com) as soon as possible.

Auckland Botanical Society

Meeting: Wednesday 7 November at 7.30 p.m. for a talk by Ian Horner titled 'Plant diseases'. **Venue:** Unitec Room 115-2017.

Contact: Maureen Young, email: youngmaureen@xtra.co.nz.

Field trip: Saturday 17 November to Watercare land. Leader: Mike Wilcox.

Contact: Maureen Young, email: youngmaureen@xtra.co.nz.

Waikato Botanical Society

Field trip: Sunday 11 November to the Nash Covenants, Woodlands Rd, Waihi Revisited (combined with Rotorua Botanical Society).

See below for details.

Field trip: Sunday 2 December to McLaren Falls Park (with Rotorua Botanical Society).

See below for details.

Rotorua Botanical Society

Field trip: Sunday 11 November to the Nash Covenants, Woodlands Rd, Waihi Revisited (combined with Waikato Botanical Society). **Meet:** northern end of Woodlands Rd (25 mins south of Waihi) at 9.30 a.m. **Grade:** moderate.

Leader: Dell Hood, ph: 027 521 9260; email: dhood@xtra.co.nz.

Field trip: Sunday 2 December to McLaren Falls Park (with Waikato Botanical Society). **Meet:** the car park, Rotorua, at 8.30 a.m. or McLaren Falls at 9.30 a.m. **Grade:** easy to moderate; all routes well formed or across pasture with steeper bits stepped.

Leaders: Graeme Jane and Gael Donaghy, ph: 07 5703123; email: gtjane@kinect.co.nz.

Wellington Botanical Society

Field trip: Saturday 3 November to various places for coastal and estuarine vegetation. **Meet:** at 9.00 a.m. at the end of Pascoe Ave, Mana, off SH1 (please phone leader regarding rideshares).

Leader: Frances Forsyth, ph: 021 072 5210.

Meeting: Monday 19 November at 7.30 p.m. for a talk by Lara Shepherd titled 'Toropapa (*Alseuosmia*) – New Zealand's most confusing plant genus.

Venue: Victoria University Lecture Theatre M101, ground floor Murphy Building, west side of Kelburn Parade; enter building off Kelburn Parade about 20 m below pedestrian overbridge.

Nelson Botanical Society

Field Trip: Sunday 18 November to Lake Rotoiti. **Meet:** 8.00 a.m. at the Cathedral Steps; please contact the leader by Friday 16 November if intending to come to enable car-pooling and notification in case of cancellation.

Leader: Jane Gosden, ph: 021 498 6451; email: jlgosden@gmail.com

Canterbury Botanical Society

Meeting: Monday 5 November at 7.30 p.m. for a talk by Dr Jamie Wood, Manaaki Whenua Researcher Ecosystems and Global Change titled 'New Zealand birds and the fungi they eat'.

Venue: Upper Riccarton Library, 71 Main South Road.

Field trip: Show Weekend, Friday 16 to Sunday 18 November based around the Conway River about 7 km west (inland) from Ferniehurst, North Canterbury. **Accommodation:** (nights of 15 - 17 November) based at the Waingarō Farm cottage.

Contact: Miles or Gillian Giller, ph: 03 313 5315 if you wish to attend.

University of Canterbury Summer Course: Practical Field Botany

Practical Field Botany (BIOL305): intensive, short summer course to train in the collection, preparation, and identification of botanical specimens. **Venue:** University of Canterbury Cass Mountain Research Area, Canterbury. **Dates:** 17–25 January 2019.

More information: Matt Walters (matt.walters@canterbury.ac.nz; ph: 03 369 5211) or Pieter Pelsler (pieter.pelsler@canterbury.ac.nz; ph: 03 369 5228)

Botanical Society of Otago.

Weekend field trip: Friday 9 – Sunday 11 November 2018 to Southland based at Camp Taringatura, 809 South Hillend Dipton Road (make your own accommodation arrangements); please contact the leader by 5 November if you intend to come; travel arrangements will be advised.

Leader: John Barkla, ph: 03 476 3686; email: jbarkla@doc.govt.nz

Meeting: Wednesday 14 November at 5.20 p.m. for a talk by Colin Meurk, Landcare Research, titled "Native Plants are vital to Nationhood not just 'nice to have, optional extras'"

Contact: Gretchen Brownstein,
email: brownsteing@landcareresearch.co.nz

Weekend field trip: Saturday 1 December to Sunday 2 December to Oteake Conservation Park (jointly with Forest and Bird); please contact Daid if you intend to go. **Accommodation:** Naseby Campground (people are responsible for making their own arrangements, book early).

Contact: David Lyttle,
ph: 03 454 5470;
email: djl1yttle@gmail.com
