



TRILEPIDEA

Newsletter of the New Zealand Plant Conservation Network

No. 178

September 2018

Deadline for next issue:
Monday 15 October 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



Manoa colensoi. Photo: Rowan Hindmarsh-Walls.

Allan Mere Award for 2018

Ewen Cameron, Secretary, New Zealand Botanical Society (ecameron@aucklandmuseum.com)

The NZBS Committee is pleased to announce that this year's award of the Allan Mere is to Dr Ilse Breitwieser, Manaki Whenua-Landcare Research, Lincoln. Ilse was nominated by Patrick Brownsey and Wendy Nelson, supported by four regional Botanical Societies (Otago, Canterbury, Wellington and Auckland), NZPCN, and 15 individuals, including ones from the following organisations: DOC, Te Papa, MPI, Massey University and the Australian Academy of Science.

The proposers included: "As Science Leader, Ilse was responsible for determining research priorities, maintaining partnerships with other agencies, and attracting funding. She used an Advisory Board of end-user groups to ensure that only the highest priority plant systematic research was undertaken. She also tried to retain capabilities across major plant groups, and to maintain the services of the Allan Herbarium. It is to her immense

credit that, in a period when funding declined in real terms, she managed to maintain a functional herbarium, botanical expertise in most plant groups, a range of plant informatics services and a research programme that continues to deliver exceptional outputs.

The main achievements in plant systematics have been the Flora volumes—two volumes on *Lichens* (2007), the first of four volumes on *Liverworts and Hornworts* (2008), and the *Flora of the Cook Islands* (2016). The electronic Flora was launched in 2011 and is available both online and as downloadable pdfs. There are 35 family treatments for mosses, 17 for ferns, and four for vascular plants (<http://www.nzflora.info/publications.html>), with work progressing on *Veronica* and *Carex*. There is also a Weed Profile that provides information and images for numerous species of potentially invasive plants. A huge amount of information on poorly documented plant groups has been made available, and Ilse has regularly promoted the Flora series nationally and internationally.



Ilse Breitwieser receiving the Allan Mere Award from Dr Anthony Wright, President of the New Zealand Botanical Society.

PLANT OF THE MONTH – *MANOAO COLENZOI*

The plant of the month for September is *Manoao colensoi*, the only *Manoao* species in the world, the genus being monotypic. The species is found in both North and South Islands from Te Pahi in the north to Te Anau Downs in the south. It is rare in the northern North Island, being confined mainly to the Volcanic Plateau, and is restricted to the wetter western areas of the South Island. The species is endemic to New Zealand and is currently listed as Not Threatened because it is still fairly widespread in the South Island, with no immediate threats, but has been heavily logged in the past for fence posts and house piles.



Manoao colensoi juvenile foliage (left), adult foliage and male cones (right). Photos: Rowan Hindmarsh-Walls.

Being a hardy species, it is mostly found in infertile, poorly drained areas such as pakihi wetlands. It is often a tall narrow columnar tree, up to 20 metres and exhibits this columnar form from the seedling stage. The plants are polymorphic, having different adult and juvenile foliage. Adult branches are covered in small pointed scale like leaves uniformly pressed to the stem, whereas in juvenile plants the leaves are more open and spirally arranged. The species is dioecious (male and female flowers on different plants), with males having small pink pollen cones, and the females solitary purple-black fruit nestled in a yellow-green fleshy epimatium. Bark of adult trees is silver with a hammered texture. The heartwood of the species is incredibly waxy and, as a result, is one of the most durable timbers in the world, being able to survive intact on wet ground for more than 50 years (*pers. obs.*).

The species is similar to other New Zealand podocarps such as *Halocarpus biformis*, *Halocarpus bidwillii*, *Halocarpus kirkii* and *Dacrycarpus dacrydioides*. It is distinguished from all but *H. kirkii* by the adult leaves which are pressed very closely to the stem, making the branches smooth, unlike the others which are rough to the touch. *Halocarpus kirkii* has much larger bushy juvenile foliage than that of *M. colensoi*, and is found only in the far north of the North Island. The general form of erect columnar plants with drooping soft foliage and its preference for particularly poorly drained infertile areas also distinguishes *M. colensoi* from most other podocarps.

The genus *Manoao* is in the family Podocarpaceae, along with other distinctive New Zealand genera such as *Podocarpus*, *Dacrydium*, *Phyllocladus* and *Halocarpus*. The genus name *Manoao* is derived from the Māori name for the only species in this genus, and the species epithet *colensoi* is named after William Colenso, a Cornish Christian missionary and botanist, stationed in New Zealand.

You can view the NZPCN website factsheet for *Manoao colensoi* at: http://www.nzpcn.org.nz/flora_details.aspx?ID=1390

We want to acknowledge Ilse's outstanding stewardship of plant systematics in New Zealand over the last 13 years. Without her firm resolve, commitment to the highest standards of scholarship, and belief in the long-term value of plant taxonomy and systematic capability, it is likely that staff and resources in systematic botany would have been eroded still further."

A selection of comments below from her supporters indicates the wide support for Ilse and the projects she has been involved in over the last 13 years:

"Ilse was a key person integral to the development of the Outcome Based Investment (OBI) approach to a large and integrated research endeavour to define New Zealand's Terrestrial Biota. This meant integrating plant, invertebrate and micro-organism systematics and collections and involving multiple institutions. Ilse took on overall leadership of the OBI and this meant increasing interaction with end users and other stakeholders...Ilse has been prepared to move systematics into new approaches with her ability to attract good staff and retain them during challenging budgetary environments. She embraced the need to digitise collections and the published products and her support for the e-Biota will be a lasting legacy."

"She has also been a long standing and active member of the NZ National Herbarium Network... an active member of the Council of Heads of Australasian Herbaria (CHAH) where her advocacy helped to establish the Australasian Virtual Herbarium, and to secure funding for imaging of collection specimens."

"I strongly believe that the Allan Mere should be rewarded to recipients who 'work outside the box', that is people who do exceptional work outside their required tasks within their employment agreements. Ilse has done this but notably, because she has never sought recognition, public acknowledgement or praise, her 'additional' work has scarcely been noticed... It is because Ilse doesn't seek the public recognition that I feel the New Zealand botanical community owes her this long overdue recognition."

"Ilse is also hands down one of the most exceptional science leaders in New Zealand, with a style that is both fearless and peerless... Her various leadership roles are so important and yet often are "invisible" or behind the scenes."

"She has made very substantial contributions to New Zealand taxonomy and systematics, in her previous capacity as Portfolio Leader of Landcare Research's Characterising Land Biota portfolio, as an Executive Member of the Council of Heads of Australasian Herbaria, more recently as a Council Member of the International Association of Plant Taxonomy, and above all as a taxonomist and systematist of high standing. Her professionalism, leadership, and dedication to the field of taxonomy and systematics are exemplary, as are her advocacy for, and representation of, New Zealand botany on a world stage. On a more personal note, Ilse is one of the most engaging, delightful and caring people in our science community. On many occasions I've had cause to value her humour, insight, supportiveness, sound judgment, and good company. Our discipline is strengthened, lightened, and made more convivial by having Ilse in it."

Congratulations, Ilse, and now that you have stepped down to go back to being a researcher, we look forward to your progress with your revision of *Craspedia*. On behalf of the Society, the President hopes to be able to present the Allan Mere to you later in the year at Manaaki Whenua – Landcare Research at Lincoln.

(Editor's notes: *This citation was first published in the September NZ Botanical Society newsletter and is reproduced here with permission. On Wednesday 19 September, Ilse was presented with the Allan Mere by Dr Andrew Wright, President of the New Zealand Botanical Society. Since then, Ilse has sent a personal letter of thanks to the nominators and the Network and other supporters.*)

Specimens of *Chrysothrix* (yellow lichen) wanted for study

Peter J. de Lange (pdelange@unitec.ac.nz) and Dan J. Blanchon (djblanchon@unitec.ac.nz)

Chrysothrix (see images) is a very common leprose (powdery) lichen in New Zealand. For many years, we thought we had one species, *C. candelaris*, but we now know that we have at least three species, *C. candelaris*, *C. granulosa* and *C. xanthina*. To better understand these lichens, their ecology, abundance and threat status we are undertaking research on them.



Top left: *Chrysothrix*, saxicolous (growing on rocks), Blue Mountains, NSW, Australia. Bottom left: *Chrysothrix* on mamaku (*Cyathea medullaris*), Kendal Bay, Waitemata, Auckland. Centre: *Chrysothrix xanthina* on Chinese windmill palm (*Trachycarpus fortunei*), Herne Bay, Auckland. Right: *Chrysothrix xanthina* on *Chamaecyparis obtusa*, Mt Albert, Auckland

Ironically, because *Chrysothrix* is so common and was believed to represent a single species in New Zealand, it is under-represented in New Zealand's herbaria. So we are very interested in receiving fresh collections of this species, especially from outside the Auckland region, from where it has been reasonably well collected.

To help us in our study, we would appreciate receiving specimens of *Chrysothrix*. These should be about 3 × 3 cm in size, air dried first, then placed in paper packets or envelopes, complete with location details, latitude and longitude or map grid reference, collector, date etc., (as per the usual herbarium label) and please note the substrate from which the lichen was collected (host plant, bark, rock, etc.).

Please post specimens to the following address:

Dr Peter J. de Lange, Environment and Animal Sciences, Unitec Institute of Technology, Private Bag 92025, Victoria Street West, Auckland 1142

Request from the Curator of the Royal Botanic Gardens Victoria

Kate Roud, Curator, New Zealand Collection, RBGV Melbourne (kate.roud@rbg.vic.gov.au)

Kia ora, everyone!

My name is Kate Roud and I am the Curator of the New Zealand Collection here at Melbourne Gardens, Royal Botanic Gardens Victoria (RBGV). During my (almost) five years here, I've been lucky to meet some of you on various trips to New Zealand and you have been kind enough to share your expertise and knowledge with me.

In 1906, our New Zealand Collection was created as the last major work by our second Director, the renowned landscape designer, William Guilfoyle. As a valued and historic collection, we are keen to see it flourish but we are facing two specific challenges:

How do we select New Zealand plants and trees that will survive climate change (warming and drying) and still maintain the style of our much-loved heritage landscape?

How do we increase our percentage of wild-collected taxa whilst respecting all local and international protocols, such as Wai 262 and the Nagoya Protocol, and quarantine regulations?

I am currently preparing an application for a Friends of the RBGV Scholarship with a view to visiting in November 2019 for the next NZPCN Conference and then making a study tour to gardens, nurseries or projects of interest. Ideas, so far, include checking out the amazing new seed-banking facilities at Otari-Wilton Native Botanic Garden, Wellington, spending some time at the NZ Indigenous Flora Seed bank at Massey University, Palmerston North, and meeting with Melanie Mark-Shadbolt of Te Tira Whakamātaki.

I'd be very grateful for any ideas or suggestions you may have for other gardens, parks, nurseries, projects or people to visit. We are also keen to seek your and other's advice on native plants or trees that show resilience against drought and/or hot days.

Please contact me at kate.roud@rbg.vic.gov.au with your suggestions. If you are planning a visit to Melbourne any time, I hope you'll include the Melbourne Gardens in your itinerary and come and say "Kia Ora!"

New Zealand flora overseas

Eric Scott, NZPCN Administrator

The item in the August issue on this topic produced both the fastest response and the greatest number of responses that I have had from items I have published in the newsletter. Here is what other Network members have seen:

You are probably aware that NZ flax is pretty much a weed on Tristan da Cunha. As it was not a native, I did not take any photos of it per se, but attached are a few where it appears incidentally. They use the dead flower spikes as temporary walking sticks.



Second email:

The other interesting connection between NZ and the central southern Atlantic is that Gough Island, about 200 nm south of Tristan, is the only other site, other than NZ and Chile, where the kowhai occurs naturally. Just 6 specimens in one gully I think.

Julian Fitter

What a good idea. Here is my contribution. Here are two NZ species used as landscaping around the Coit Memorial Tower in San Francisco. It certainly brought home the universality of non-local plants used as landscaping around important civic buildings and sites! I reckon here in Christchurch we should make more use of pohuehue as a ground cover and hedges.



Alice Shanks

Kia ora!

I've just seen the article in Trilepidea about NZ plants overseas. I'm not sure if I have any photographs, but I have seen—yes, cabbage trees and flax—growing in Wales, and in Sonoma County, California (featured quite prominently in one vineyard I visited, but also in gardens). Many years ago I collected nikau seeds for a plant enthusiast in Los Angeles, who said there was a long line of them along one of the city avenues and he wanted to establish them in his own nursery. He had trouble getting them to germinate, which may have been due to irradiation, if they did that at the border, as I had no trouble in germinating seed from the same tree at home. If any members are visiting LA, perhaps they could keep an eye out for nikau! I'm pretty sure I've also seen NZ natives in Spain.

And of course karaka is a pest plant in parts of Hawai'i, particularly Kauai where it was sown broadcast by air to aid in reforestation in the late 1920s! If I come across any photographs, I'll send them to you.

Richard Benton

The latest issue of Trilepidea reminded me of my summer vacation experience in Denmark's Legoland (Billund), where I saw cows eating Leptinella. ☺ So much for the use of NZ flora overseas. Best wishes.



Dirk Albach, Universität Oldenburg

New Zealand Plant Conservation Network annual awards—Time is running out!

It is again time again to honour those who have made an outstanding contribution to native plant conservation in New Zealand. The New Zealand Plant Conservation Network is now calling for nominations for the 2018 awards.

Award categories are:

- Individual
- School
- Council
- Community
- Plant Nursery
- Young Plant Conservationist of the Year (under 18 years at 30 June 2018)

The nomination form is attached to the end of the newsletter and is available from the Network website (www.nzpcn.org.nz)

Only six weeks to go before nominations close for the prestigious NZPCN awards. Please circulate this information to your networks and encourage people to make nominations. Anyone is eligible to make nominations, not just Network members. It is also possible to make nominations in each of the different categories. Nominations close on **Friday 5 October 2018**.

The awards will be presented at the **2018 Network Annual General Meeting**.

Whanganui Regional Museum Botanical Group Golden Anniversary

You are invited to a special celebration of the 50th anniversary of the Whanganui Regional Museum Botanical Group on Saturday 27 and Sunday 28 October 2018. A varied programme has been planned. There are now flights by Chathams Air between Auckland and Whanganui: <https://www.airchathams.co.nz/Airline-Info/whanganui-schedule/>. The hosts can arrange pick-up from and delivery to Whanganui airport. Please book your own accommodation; some is available at the Quaker Settlement (twin share \$45 each, per night, or your own room \$60 (including linen and towel), sleeping house \$30 each (take your own bedding and towel). Contact: www.quakersettlement.co.nz/facilities-bookings/charges-and-fees/

By arriving a day or more before, or staying on after Sunday, you can check out some of the other local botanical options. Members of the Botanical Group may be available to show you around if you would like a guide. Places to explore include Gordon Park Scenic Reserve (10 ha of swamp forest with an all-weather track); the James McGregor Arboretum at Kowhai Park on the true left of the awa; coastal dunes at Castlecliff (see a local dune restoration project or unmanaged dunes to the west, with interesting garden escapes among lots of splendid spinifex; Bason Botanical Gardens. For the more adventurous, consider a day trip to the Waitahinga Trails (mainly tracked black beech forest). The Botanical Group has plant lists available for most of these places.

Potential attendees are invited to contact Margi Keys, the anniversary committee's convenor (see below), for details. Registration is \$60 pp. Registrations should be made with Margi Keys (email: margikeys93@gmail.com or ph: 06 344 1250).

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.
-

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 3 October at 7.30 p.m. for a talk by Ewen Cameron titled 'Costa Rica'. **Venue:** Unitec Room 115-2017.

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

Field trip: Friday 12 – Sunday 14 October for a camping trip to Motutapu Island.

Leader: Shelley Heiss-Dunlop.
Contact: Maureen Young, email: youngmaureen@xtra.co.nz

Kaipatiki Project

Meeting: Thursday 25 October at 6.00 p.m. for the AGM and 20 Years Celebration. We will be having exciting speakers and sharing our journey over the last 20 years. **Venue:** Rawene Centre 33 Rawene Rd, Birkenhead, Auckland.

Register: office@kaipatiki.org.nz

Rotorua Botanical Society

Field trip: Sunday 7 October to Meremere Scenic Reserve, Motu Rd. **Meet:** Opotiki I-site/DOC office at 9.00 a.m. (there is an option of going over on Saturday night with accommodation. **Grade:** moderate to hard.

Leader: Mike Butcher, ph: 07 3157160, 0274 555 610; email: mikebutchernz@xtra.co.nz.

Field trip: Saturday 13 October for an Okareka Mistletoe Restoration Project Weed Control/Plant Releasing Work Day. **Meet:** corner Summit and Loop Rds, Okareka (lake end) at 8.45 a.m. **Grade:** medium-hard – activities suitable for all ages and abilities will be provided.

Leader: Paul Cashmore, ph: 07 349 7432 (wk) or 027 650 7264; email: pcashmore@doc.govt.nz

Whanganui Regional Museum Botanical Group

Golden Anniversary: Saturday 27 and Sunday 28 October.
See story above.

Information and to register:
Margi Keys, email: margikeys93@gmail.com or ph: 06 344 1250.

Wellington Botanical Society

Field trip: Saturday 6 October to Mt Maunganui, Akatarawa Forest. **Meet:** at 9.45 a.m. at the end of the tar seal on Maungakotukutuku Rd. By train: Kapiti Line train ex Wellington Station, 8.14 a.m. to Paekakariki; ask Owen to meet you in station car park at 9.00 a.m.

Leader: Owen Spearpoint, ph: 027 285 8083, 04 830 4418 (w), 04 562 8780 (h); email: Owen.Spearpoint@gw.govt.nz.

Meeting: Monday 15 October at 7.30 p.m. for WCC, student and other presentations.

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 7 October to Inches Bush, Wairoa Valley, for weedbusting and botanising. **Meet:** 8.00 a.m. at the Cathedral steps or 8.25 a.m. at the Brightwater Motor Inn corner, Main Highway and River Terrace Rd. Please let Shannel know by Friday 5 October if you are coming so that you can be notified in case of cancellation and to enable car pooling.

Leader: Shannel Courtney, ph: 027 499 1441, email: scourtney@doc.govt.nz

Field trip: 19–22 October for the Labour Weekend camp to Kaikoura.

Organiser: David Grinsted, ph: 03 542 4384; email: davidgrinsted@gmail.com.
Leader: Cathy Jones.

Canterbury Botanical Society

Meeting: Monday 1 October at 7.30 p.m. Talk by Hermann Frank titled 'The lizard fauna of South Canterbury limestone and the plants they inhabit'.

Venue: Upper Riccarton Library, 71 Main South Road.

Field Trip: Saturday 6 October to Tiromoana Bush, Kate Valley.

Contact: Alice Shanks if you intend to come; email: alice@caverock.net.nz; ph: 027 366 1246 so she can let you know if the trip is cancelled.

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.

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. **Enrolment:** starts 1 October 2018.

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

Field trip: Saturday 6 October, to 'Dogwood' at Kuri Bush.

Meet: at the Botany Department at 8.30 a.m. to carpool or on-site at 9.10 a.m. (see location map on website); rain date Sunday 7 October.

Contact: Janice Lord,
ph: 029 4881900.

Meeting: Wednesday 10 October at 5.20 p.m. for a talk by Professor Peter Holland titled 'Were native plants on settler's farms in southern New Zealand used or abused?' Entries for the biennial Audrey Eagle Botanical Drawing Competition will be displayed and the prize winners announced at this meeting.

Venue: the Zoology Benham Building, 346 Great King Street, behind the Zoology car park by the Captain Cook Hotel; use the main entrance of the Benham Building to get in and go to the Benham Seminar Room, Rm. 215, 2nd floor and please be prompt as we have to hold the door open.

Contact: Allison Knight, email:
allison.knight.nz@gmail.com



NEW ZEALAND PLANT CONSERVATION NETWORK

PLANT CONSERVATION AWARDS: 2018

The New Zealand Plant Conservation Network is now accepting nominations for the 2018 awards. The purpose of these awards is to acknowledge outstanding contributions to native plant conservation.

The award categories are:

- Individual** involved in plant conservation
- Plant nursery** involved in plant conservation
- School** plant conservation project
- Community** plant conservation project
- Local authority** protecting native plant life
- Young Plant Conservationist** of the Year (under 18 years on 30 June 2018)

More information about the awards and additional nomination forms are available on the Network website - www.nzpcn.org.nz. You can make multiple nominations under different categories. Anyone is eligible to make nominations, not just Network members. The awards will be presented at the **2018 NZ Plant Conservation Network AGM** in November. Winners will be informed in advance of the meeting. Nominations close on **Friday 5th October**.

NOMINATION FORM

Category (please circle):

Individual *Plant* *Nursery* *School*
Community *Local Authority* *Young Plant Conservationist*

NAME OF NOMINEE: _____

Contact details for person, school, nursery, community group or local authority:

Address: _____

Phone: _____ Email: _____

