TRILEPIDEA
Newsletter of the New Zealand Plant Conservation Network

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Deadline for next issue:
Friday 18 December 2026

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 info@nzpcn.org.nz

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NEW ZEALAND

PLANT OF THE MONTH, p. 2



Azorella cockaynei. Photo: Pieter Pelser (CC BY from iNaturalist).

He Pihi Kāuru – last few days to apply

Alex Fergus, Taylor Davies-Colley, Joanna Smith

The first round of NZPCN's new He Pihi Kāuru fund, a native plant conservation fund for Māori and Moriori communities, will close on Friday 27 November. We thank everyone who has got in touch to date with questions around the suitability of their projects. These conversations have been really encouraging in terms of a need for and potential uptake of the fund. The purpose of the fund is to support Māori and Moriori native plant conservation or ecosystem restoration by nurturing new ideas, supporting emerging opportunities and empowering Māori whānau, hapū and Moriori hunau, pui to realise their plant conservation aspirations.

The name, He Pihi Kāuru, was a collaboration from Rāwiri Walsh and Holden Hohaia. Holden notes "the name draws on the imagery of *pihi*, representing new shoots and emerging potential, and *kāuru*, evoking the uppermost growing reaches of a tree." Together the two kupu symbolise a journey of growth — from the first emergence of an idea to its full flourishing.

Examples of projects the fund would encourage include Mātauranga Māori focused conservation and restoration methods; restoration projects for native plant species; conservation projects for native plant species including seed banking; research to support conservation of native plant species, and community engagement for education programmes increasing awareness of native plant species.

More information can be found here:

https://www.nzpcn.org.nz/nzpcn/he-pihi-kauru/

A belated thanks to everyone involved with Mahia nga here – the 2026 NZPCN conference

Alex Fergus, NZPCN President (fergus.alex@gmail.com)

Tēnā koe koutou/hello everyone. This is a short note that missed the deadline for October's issue of Trilepidea. A huge thank you to everyone involved in organising our 2026 Te Whanganui-a-Tara/Wellington conference, and to all of you who attended.

NZPCN conferences are wonderfully odd events. In a relaxed social setting we profile plant conservation, community and research, or a mix of the above; we reminisce, we make new connections, we learn. They are the second most important thing that NZPCN does beyond our website, and we can only make them work through tireless volunteer hours dedicated by organising teams, and by the willingness of folks to attend.

I want to bring special attention to Megan Ireland and all the time and energy she committed to bringing the conference together. Megan was well supported by the largest volunteer team we've yet had for a conference, a brilliant mix of individuals and a wide range of organisation representatives. Many thanks to Anita Benbrook, Bill Campbell, Hamish Carson, Raydeen Cuffe, Tayla Hooker, Heidi Meudt, Mike

Oates, Tim Park, Barrett Pistoll, Rawiri Walsh and Matt Ward. Thanks also to all the workshop coordinators and field trip leaders. All your contributions are highly valued and essential.

Please keep an eye to our December issue of Trilepidea, where we will start to give you a sense of the organisers' vision for our next conference, only 11 months away, in Waiharakeke/Blenheim.

Ngā mihi nui ki a koutou katoa/thank you all.

PLANT OF THE MONTH – *AZORELLA COCKAYNEI*

Jane Gosden (jlgosden@gmail.com)

Last month we featured one of the largest *Azorella* species, so it seemed fitting to follow it up with the smallest. Introducing *A. cockaynei,* a diminutive plant of wetlands and other damp places. This little plant requires some hands and knees botany to spot because the leaves are 2–4 mm in diameter. The simple leaves grow on slender petioles up to 15 mm long. The plants have rhizomes or stolons that root at nodes to form tiny patches.

Like other Apiaceae, the flowers are clustered in umbels and in *A. cockaynei* these are held on peduncles up to 20 mm long.



Azorella cockaynei showing the simple leaves, developing fruit, and a single flower. Photo: Pieter Pelser, taken from iNaturalist, CC BY.

Azorella *cockaynei* has a national conservation status of Not Threatened. In Otago it is considered Regionally At Risk – Regionally Naturally Uncommon.

This tiny herb is found in Otago, Southland and on Stewart Island. You can see *A. cockaynei* in both inland and coastal locations. It has a variable habitat range from coastal turfs and herbfields, dune slacks, alpine wetlands, seepages, lake shore turfs and kettle holes.

Azorella cockaynei is named after Leonard Cockayne FRS (7 April 1855 – 8 July 1934).

The factsheet for *Azorella cockaynei* can be found here: https://www.nzpcn.org.nz/flora/species/azorella-cockaynei/

2026 Favourite Native Plant Vote

Jesse Bythell (jesse.bythell@gmail.com)



Pygmy sundew (*Drosera pygmaea*)—2026 Favourite Native Plant winner. Photo: Marley Ford

It's official, pygmy sundew has taken out the top spot in the 2026 NZPCN Favourite Native Plant Vote! It was a tight race with ardent campaigning happening around the motu, resulting in several different plants occupying the leading position over the month-long voting period.

Maire tawake/swamp maire (*Syzygium maire*, Threatened – Nationally Vulnerable) was in the lead for a significant portion of the vote, trailed by the diminutive but magnificent herbs, tarn speedwell (*Veronica lilliputiana*, At Risk – Declining) and pygmy sundew (*Drosera pygmaea*, At Risk – Naturally Uncommon). Jostling over second place continued until the last week of the vote, when the National Wetland Trust came out strongly backing pygmy sundew and it raced into the winning spot.

The purpose of the annual plant vote is to celebrate our weird and wonderful flora as we as highlight their fascinating stories and raise awareness of their vulnerabilities. The vote has been run for over twenty years and has turned up some interesting winners at times, including a moss *Archidium elatum* (2025) and pua o te reinga (2017).

This year's candidates were a diverse selection of wetland plants—ranging from the iconic tī kōuka/cabbage tree (*Cordyline australis*), to the minute aquatic water-meal (*Wolffia australiana*). Around 30% of native vascular plants are found in wetlands and because over 90% of wetlands in Aotearoa New Zealand have been destroyed this means many wetland species are classified as At Risk or Threatened. There are many types of wetlands in Aotearoa New Zealand such as estuaries, bogs, fens, swamps and ephemeral wetlands, each of which support a suite of plants adapted to their specific conditions.



Maire tawake (*Syzygium maire*). Photo: Colin Ogle.

The candidates which came in the top three positions highlight some of the pressures facing our wetland flora. Maire tawake is threatened by historic clearance and drainage around its habitat which affect the regeneration of young trees and myrtle rust, a fungus which attacks the trees' leaves, flowers and fruit. Tarn speedwell is an ephemeral wetland herb from Canterbury and Otago which is under pressure from a range of factors such as livestock trampling, competition from weeds and very limited legal protection for the land tenure it typically occurs on.

Pygmy sundew is a carnivorous herb found around Aotearoa New Zealand, but it is sparse and threatened by wetland drainage and competition from taller weeds. It is the first time a carnivorous native plant has featured in the top ten finalists. Many voters expressed their admiration for the adaptive features of this plant which can be described as 'making its own blood and bone', as well as their desire to see this diminutive and easily overlooked species in the wild.



Tarn speedwell (*Veronica lilliputiana*). Photo: Melissa Hutchison.



Swamp helmet orchid (*Corybas carsei*). Photo: Catherine Beard.

NZPCN President Alex Fergus said, "personal favourites and unfunded micro-campaigns aside, the top 10 finalists of this year's NZPCN Favourite Native Plant vote remind us of the significant challenges faced by our native wetland flora". He noted that more than half of the 2026 top 10 plants have a conservation status of At Risk – Declining or worse. Dr Fergus said, 'there are a multitude of pressures on native wetland plants including habitat lost, ongoing drainage, fire, weeds, ungulates and fungal pathogens which have led to significant reductions in distributions and population sizes and even regional extinctions. Dr Fergus went on to say "perhaps the most extreme example is the swamp helmet orchid (*Corybas carsei*), now known from a single population in Whangamarino Wetland, but thankfully, with an active restoration programme—thanks to all those involved! Our wetland flora and our wetlands need more protection and attention, hopefully this year's vote has shone a light on them."

Top 10 finalists for 2026 Favourite Plant Vote:

1. Pygmy sundew (*Drosera pygmaea*) At Risk – Naturally Uncommon (17%)
2. Maire tawake | swamp maire (*Syzygium maire*) Threatened – Nationally Vulnerable (15%)
3. Tarn speedwell (*Veronica lilliputiana*) At Risk - Declining (9%)
4. Kahikatea (*Dacrycarpus dacrydioides*) Not Threatened (8%)
5. Swamp helmet orchid (*Corybas carsei*) Threatened – Nationally Critical (6%)
6. Swamp greenhood orchid (*Pterostylis micromega*) Threatened – Nationally Critical (4.5%)
7. Nana/eelgrass (*Zostera muelleri* subsp. *novozelandica*) At Risk – Declining (4%)
8. Manawa/mangrove (*Avicennia marina* subsp. *australasica*) Not Threatened (3.5%)
9. Swamp leek orchid (*Prasophyllum hectorii*) Threatened – Nationally Vulnerable (3%)
10. tī kōuka/cabbage tree (*Cordyline australis*) Not Threatened (2.5%)

Data Deficient moss surveys, Waikato 2026

Marley Ford (Private Consultant, mfecobotany@gmail.com), Andrew Townsend (Department of Conservation, atownsend@doc.govt.nz), Ryan DeRegnier (Unitec, deregnier@gmail.com), and Thomas Emmitt (Department of Conservation, temmitt@doc.govt.nz)

This report compiles data collected on two Data Deficient (Michel et al., 2026) moss species in the family Funariaceae Schwägr. during surveys on 22–23 June 2026 in the Waikato. It continues work begun in Northland and Auckland in 2025–2026, which surveyed four other Data Deficient mosses (Ford et al., 2026). The lower Waikato River was surveyed by the boat *Vigilant*.

The survey aimed to gather information on the distribution, abundance and threats of *Physcomitrium pusillum* Hook.f. & Wilson (Figure 1) and *Physcomitrium readeri* (Müll.Hal.) R.Medina & Goffinet (Figure 2), to support a better-informed threat assessment and, ultimately, their conservation in New Zealand. Both are Australasian species, native elsewhere only to south-eastern Australia. Both species had previously been assessed as Threatened – Nationally Critical (Glenny et al., 2011) but had recently been reassessed as Data Deficient, reflecting how little was known about them (Michel et al., 2026). Prior to this survey, both species were known in New Zealand from only a handful of sites in the Auckland and Waikato regions and had not been collected in the Waikato since 1983 (Figure 3).

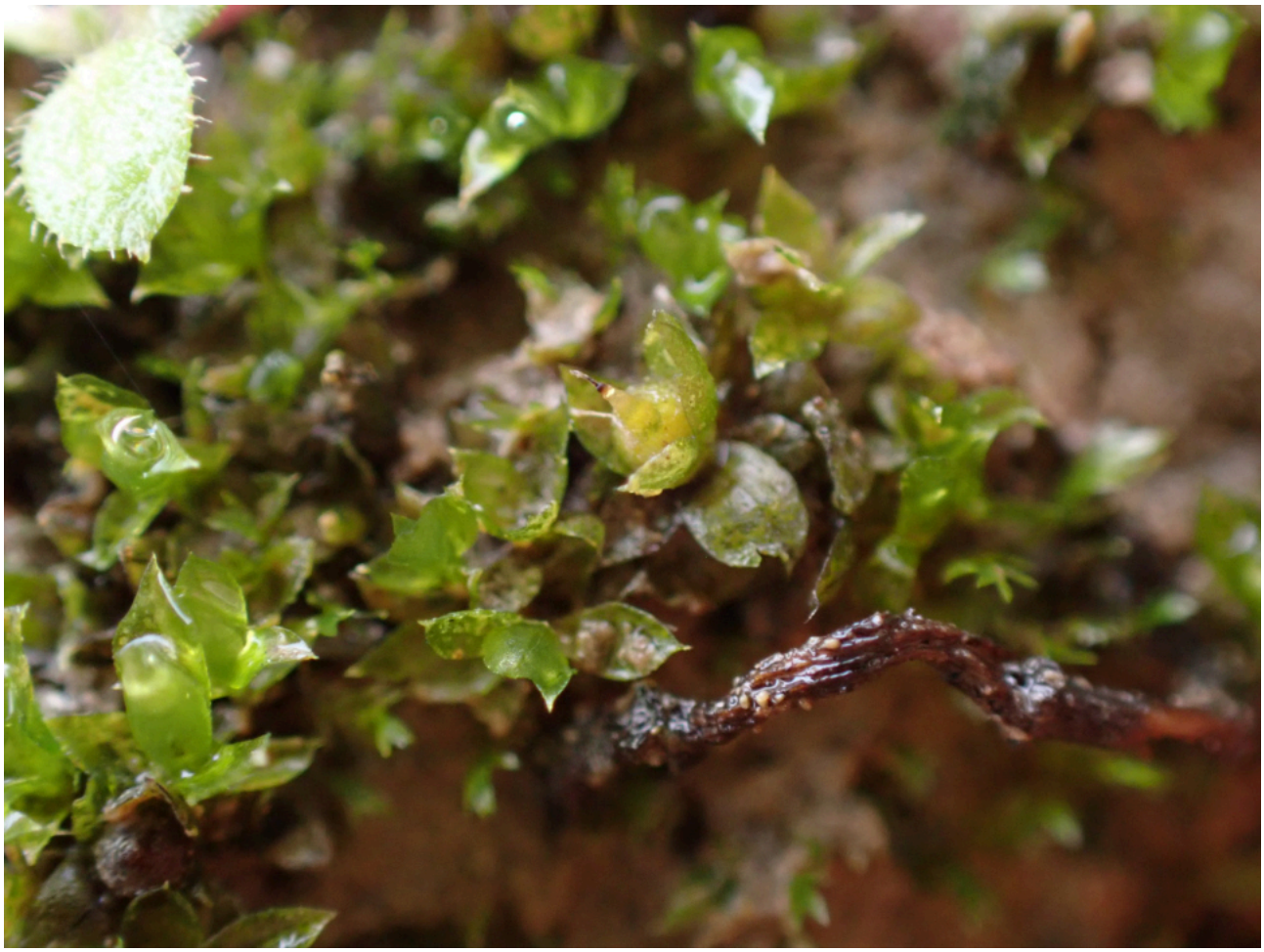

Figure 1. *Physcomitrium readeri* on damp soil under shaded willow carr on the bank of the Whangamarino River, Whangamarino Wetland Management Reserve, 22 June 2026 (MF 3980, AK). Photo: M. Ford.

Physcomitrium readeri (Figure 1) has had an unsettled nomenclatural history. It was originally described as *Ephemerella readeri* Müll.Hal. from material collected by F.M. Reader at Dimboola, Victoria, in 1897, and has since been placed in *Physcomitridium* and *Physcomitrella*. In the Flora of New Zealand treatment of the Funariaceae, Fife (2019) placed it in *Physcomitridium*. Later that year, a phylogenomic study based on nuclear exons and their flanking regions rejected the retention of

Physcomitrella, *Physcomitridium* and *Aphanorrhegma* as distinct genera (Medina et al., 2019), and the species reverted to *Physcomitrium readeri*. Outside New Zealand it is known from mainland Australia (Victoria and New South Wales). It has also been reported from Tasmania (Fife & Seppelt, 2001) and South Australia, where it grows on silt by the Murray River and at the edges of billabongs (Catcheside, 1980). It has been reported as a possible adventive in Britain (Hooper et al., 2010), although Fife (2019) did not assess that record. Prior to this survey, it was known in New Zealand from three sites along the lower Waikato River (near the Whangamarino confluence, Meremere and near Kōpuku), all collected between 1975 and 1983 (Fife, 2019; Atlas of Living Australia, 2026). There it had grown on alluvial sandy silt or clay near the river margin, sometimes mixed with *P. pusillum* and *Bryobeckettia bartlettii*. A single, more recent collection from the draw-down zone of the Lower Huia Dam reservoir in the Waitākere Ranges (2010) was referred to this species by Fife (2019) only with reservations, as it differed morphologically from the Waikato material. All previous New Zealand collections had been made in spring or autumn.



Figure 2. *Physcomitrium pusillum* on open soil of a riparian bank in the flood zone of the Whangamarino River, south of Oram Road, Mercer, 23 June 2026 (MF 3973, AK). Photo: M. Ford.

Physcomitrium pusillum (Figure 2) was described from a specimen collected by Dr Sinclair in 1850 from an unknown North Island locality (Fife, 2019). Prior to this survey, all subsequent New Zealand collections had come from a very restricted area near the lower Waikato River between Meremere and Mercer and the nearby Island Block, with the best-documented collections from near the mouth of the Whangamarino River. It had also been recorded near Kōpuku, where it grew with *P. readeri* (Fife, 2019). The species had been found on riparian silt or clay below c. 100 m elevation, sometimes mixed with *P. readeri* and *Bryobeckettia bartlettii*. It was last collected in October 1983, at a site since modified by construction of a boat launching ramp (J.E. Beever pers. comm., in Fife, 2019), and it was unknown whether the species persisted there. Outside New Zealand it is known only from a single

collection made near Melbourne, Victoria, by F.M. Reader in July 1884 (Fife, 2019). Fife (2019) considered that its ephemeral nature and occupancy of riparian silt made active management of populations unlikely to be possible.

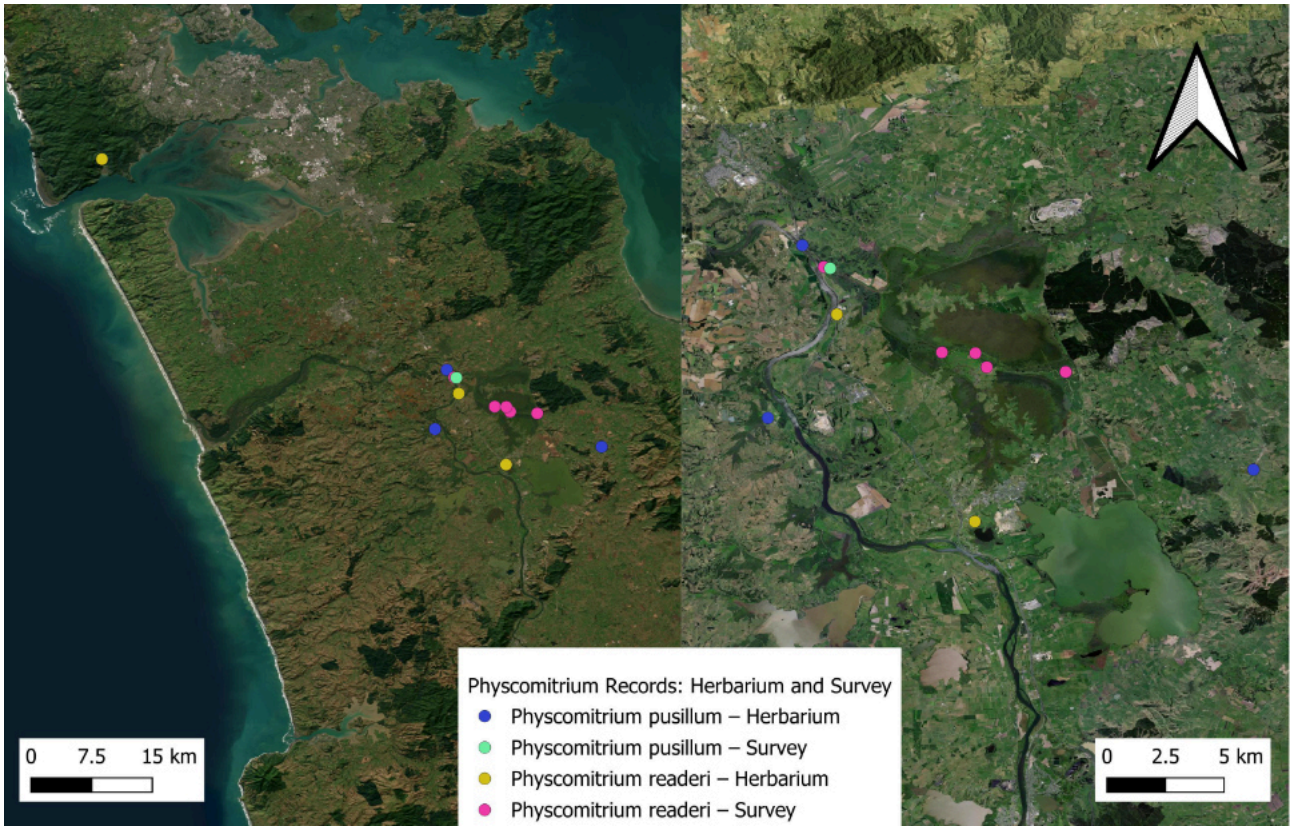

Figure 3. Records of *Physcomitrium pusillum*, *P. readeri* and *P. pyriforme* from historical herbarium specimens (AK and CHR, 1975–2010) and the June 2026 survey. Left: regional overview from the Waitākere Ranges (Lower Huia Dam) to the lower Waikato River. Right: detail of the survey area in the lower Waikato River. Herbarium locations are approximate: most AK coordinates are given only to the nearest minute (c. 1.5 km), and some records may have been georeferenced inaccurately from their label localities.

Day 1, 22 June 2026

Surveyors: Marley Ford, Thomas Emmitt, Lizzie Sharp

The boat was launched from Island Block Road, and the team travelled up the Whangamarino River to beyond the Falls Road Bridge, assessing potentially suitable habitat along the way. The habitat identified on the outward leg was then surveyed on the return trip. Because of the cryptic nature of these species, detailed field notes were taken at each collection site, and specimens were collected for microscopic confirmation by Ryan DeRegnier and Allan Fife.

Physcomitrium readeri

Eight specimens were collected in Whangamarino Wetland Management Reserve: five by Thomas Emmitt (CHR 704625–704629) and three by Marley Ford (MF 3979–3981, to be deposited in AK), the latter also recorded on iNaturalist. All were confirmed as *P. readeri*. Most were found in shaded willow carr on the bank of the Whangamarino River (c. 37.3445° S, 175.1772° E; Figures 1, 4 and 5), growing on damp soil with *Pleuridium subulatum* and *Bryobeckettia bartlettii*. One collection (CHR 704625) came from wet soil on a track among annual weeds and grasses.



Figure 4. Searching for *Physcomitrium readeri* on damp, bare soil beneath shaded willow carr on the bank of the Whangamarino River, Whangamarino Wetland Management Reserve, 22 June 2026. Photo: M. Ford.



Figure 5. Willow carr habitat of *Physcomitrium readeri* on the bank of the Whangamarino River, Whangamarino Wetland Management Reserve, showing bare silty soil with willow leaf litter and sparse grass beneath the canopy, 22 June 2026. Photo: M. Ford.

Day 2, 23 June 2026

Surveyors: Marley Ford, Andrew Townsend, Cara Hansen

Physcomitrium readeri

One specimen was collected from the bank of the Whangamarino River south of Oram Road, near Mercer (37.2937° S, 175.0604° E; MF 3975, AK), and was also recorded on iNaturalist. It formed a local patch on exposed soil of the riparian bank, about 1m below a weedy edge, growing with *Amblystegium serpens*, *Eurhynchium praelongum*, *Fissidens taxifolius* and *Leptodictyum riparium*.

Physcomitrium pusillum

One specimen was collected from the same stretch of riverbank south of Oram Road (37.2944° S, 175.0634° E; MF 3973, AK) and was also recorded on iNaturalist. It was rare, growing on open soil of the riparian bank in the flood zone (Figure 2). The plants had very short setae, broad leaves and operculate capsules. The site is about 1.5 km from J.K. Bartlett's collections near Mercer Bridge (1975 and 1979; AK188543, AK196517), close to the confluence of the Whangamarino and Waikato Rivers, where the species was best documented historically (Fife, 2019).

Conclusion

The survey found both target species in the lower Waikato, and every record is backed by a herbarium voucher. *Physcomitrium readeri* was found on both days. *Physcomitrium pusillum* was found once, near Mercer.

Physcomitrium pusillum had not been recorded since October 1983, when it was last collected near the Whangamarino–Waikato confluence, at a site since modified by a boat ramp. *Physcomitrium readeri* was last recorded in the lower Waikato between 1975 and 1983, and anywhere in New Zealand in May 2010, at Lower Huia Dam, although Fife (2019) referred that collection to the species only with reservations. The June 2026 survey therefore provides the first records of both species in the lower Waikato in over 40 years. Previous New Zealand collections of *P. readeri* were all made in spring or autumn (Fife, 2019). The June records, which included mature sporophytes, extend its known season into winter.

Both species grew in small patches on bare, damp soil on riverbanks, either under willow or on open flood-zone banks. They are ephemeral and depend on freshly exposed or deposited silt and clay, which floods and changing water levels continually create and remove. Populations are therefore likely to appear and disappear from year to year, rather than persisting in one place. Because the plants are minute and short-lived, they are easily missed and may be more widespread than records suggest.

The main threats are weed invasion of riverbanks and changes to water levels. Tall, shade-tolerant weeds such as *Tradescantia* and *Glyceria* can smother the bare soil these mosses need (New Zealand Plant Conservation Network, n.d.). Bank modification is also a threat, as shown by the loss of the 1983 *P. pusillum* site to a boat ramp.

Future work should focus on:

- Resurveying the known sites to see whether the populations persist.
- Surveying at different times of year to establish how long sporophytes are present.
- Extending searches to other suitable riverbank habitat in the lower Waikato.

Acknowledgements

We thank the Department of Conservation Threatened Species Research Workstream for supporting this survey, and Lizzie Sharp and Cara Hansen (Department of Conservation, Waikato) for skippering the boat. We also thank Allan Fife for examining specimens, Rhys Gardner and David Glenny for identifying associated mosses and liverworts, Sue Gibb for handling data, and Auckland War Memorial Museum (AK) and the Allan Herbarium (CHR) for access to specimen records.

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Are thrips an underrated threat to ramarama?

Melanie Newfield (melanienewfield@theturnstone.nz)

Earlier this year, Ben Wright pointed out some ramarama (*Lophomyrtus bullata*) plants in Khandallah Park which had thrips damage. They were looking very unhealthy, and I had assumed that the damage was caused by myrtle rust (*Austropuccinia psidii*). However, when I took a closer look, I could indeed see damage typical of thrips, such as a silvery appearance to the leaves. The plants had no myrtle rust pustules (i.e. yellow spores) and no obvious sign of active myrtle rust infection. They did have damage which could indicate past infection and a few reddish patches which could have been myrtle rust.



Healthy ramarama, without thrips damage. Photo: Melanie Newfield.

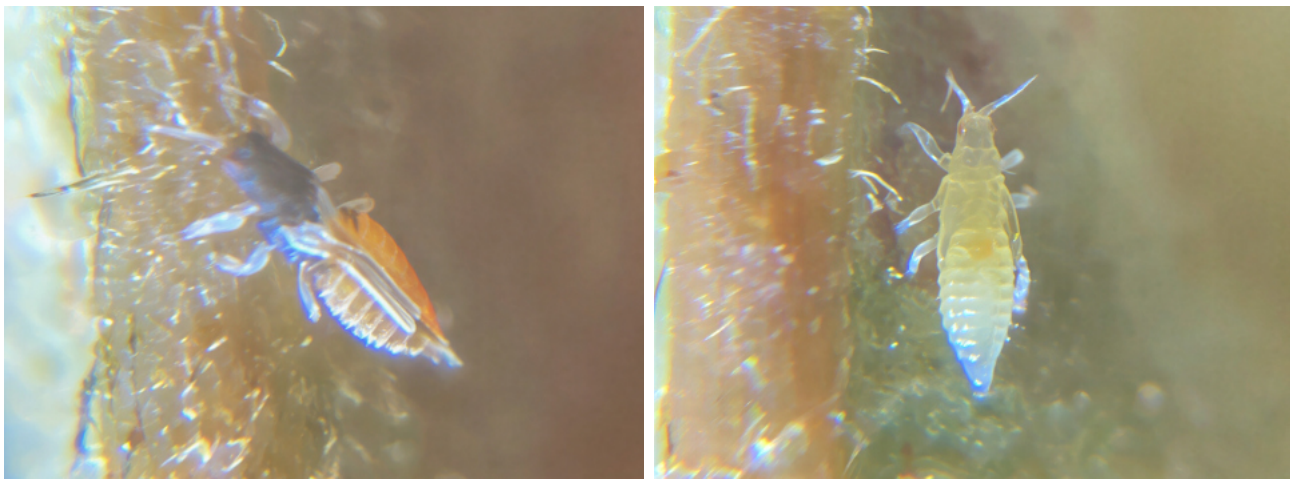


(left) Major thrips damage on rhododendron; (right) thrips damage on ramarama. Photos: Melanie Newfield.



Thrips damage on ramarama. Photos: Melanie Newfield.

I had a microscope attachment for my phone with me, so we searched the plants and found one with tiny insects crawling on the back of the leaves. I took some photos and was able to get some reasonable images. They were certainly good enough to confirm that the insects were thrips. Whether they would be sufficient to identify further, I wasn't sure.



Greenhouse thrips on ramarama. Photos: Melanie Newfield.

Thrips are tiny insects which belong to the order Thysanoptera. Whether there is only one or thousands, they are always referred to as thrips: one thrips, many thrips. The largest thrips can reach 7 mm long but most are less than 3 mm long. There are around 6300 known thrips species (Mound et al. 2022), with 127 species reported from New Zealand (Mound et al. 2017). They feed on other insects, fungi or plants. While a number are considered significant plant pests, almost all of these belong to a single subfamily, the Thripinae (Mound et al. 2022). Some are specialised feeders, such as *Podothrips turangi* which is thought to feed on scale insects on *Poa* and *Chionochloa*, or *Klambothrips annulosus*, which causes leaf galls on *Ozothamnus leptophyllus* (Mound et al. 2017). Others have wide host ranges, such as the endemic *Thrips obscuratus*, the New Zealand flower thrips, which feeds on a wide range of native and introduced plants including *Phormium tenax*, *Myoporum laetum* and peach (*Prunus persica:* Martin 2019).

My initial assumption was that the thrips found on ramarama would be a native species. However, a search of records on iNaturalist and other online resources suggested that it was most likely the introduced greenhouse thrips, *Heliothrips haemorrhoidalis*. I have since had my identification confirmed by an overseas thrips expert on iNaturalist.

The greenhouse thrips was first identified by scientists from specimens found in a German greenhouse, but it originates from tropical or subtropical parts of South America, most likely Brazil (Xie et al. 2019). It was first found in New Zealand in 1930 (Martin 2017). Despite its subtropical or tropical origins, it can be found throughout the lowland areas of the North Island. In the South Island it has been found outdoors as far south as Christchurch (Mound et al. 2017). It has been reported from more than 165 plant species in New Zealand, including around 60 native plants (Martin 2017). Ramarama is among the known hosts, as are two other threatened members of the Myrtaceae, *Metrosideros bartletii* and *Syzygium maire*, as well as *Pomaderris hamiltonii*. Many common and non-threatened plants are also hosts, including *Aristotelia serrata*, *Fuchsia excorticata, Metrosideros perforata* (Martin and Mound 2004), *Blechnum novae-zelandiae* and *Lastreopsis hispida* (Martin 2017). Thrips have been reported damaging young plants of *Ileostylus micranthus* (Pendrigh 2020) and although this report doesn't identify the species involved, the greenhouse thrips is the only thrips species recorded in the literature on this plant (Martin 2017).

Thrips which damage plants do so by feeding on the contents of epidermal cells (Cook et al. 2011). The dead cells give damaged leaves a characteristic silvery appearance, meaning that thrips damage can be recognised even when the thrips themselves are difficult to find. On ramarama it is particularly obvious, as damaged leaves lose their characteristic gloss as well. Most of the thrips which are regarded as major pests feed on young leaves, but the greenhouse thrips belongs to a group which feeds almost exclusively on mature or older leaves (Mound et al. 2022). However, any life stage of plant can be affected; in the Forest and Bird nursery in Wellington ramarama seedlings and saplings were both affected (Ben Wright pers.bcomm.)

Since first seeing thrips damage in Khandallah Park, I have kept an eye on other ramarama plants to see whether thrips damage is present. I have seen plants in other parts of Wellington with the silvering characteristic of thrips damage elsewhere in Khandallah and also in Ōtari-Wilton's Bush. One plant had many dead older leaves but little evidence of significant myrtle rust damage, although some degree of infection couldn't be ruled out. I have also observed images of ramarama plants from other areas of the North Island with silvering indicative of thrips damage on iNaturalist (see link to iNaturalist project).

It's unclear how much damage the greenhouse thrips is doing to ramarama. The first record of greenhouse thrips on ramarama dates back to 2004 (Martin and Mound 2004) and ramarama was not considered threatened until the arrival of myrtle rust. Since myrtle rust is most damaging on newer growth and greenhouse thrips damages older leaves, the impact of pest and pathogen may compound each other. It's possible that thrips may affect plants which are in environments less conducive to myrtle rust, such as cooler areas or in closed forest, such as in Khandallah Park. On the other hand,

thrips do have a pattern of fluctuating populations, where a species may have high numbers and be considered a problem for a period of time, but then decline (Mound et al. 2022)

I encourage you to look for thrips damage on ramarama and other native plants, wild or cultivated, and upload them to iNaturalist. Pay particular attention to older leaves; if the newest leaves are damaged then it's less likely to be greenhouse thrips. Identification of individual thrips species is specialised and can be difficult, but it is relatively simple to identify thrips damage (see images for examples). It is also easy to identify an insect as a thrips by their distinctive body shape if you have a hand lens. It also appears that greenhouse thrips can be identified from images taken with a basic microscope attachment to a cell phone. If you have such an attachment, please attempt to photograph thrips, especially on ramarama leaves. Where older leaves have obvious silvering at can be useful to look at leaves with less damage, as these may be where active feeding is taking place. Otherwise, photographs of the silvering are still useful.

I have created an iNaturalist project for observations of thrips damage on native plants and am going through the ramarama observations to identify those with thrips damage. There is an observation field for recording whether or not thrips are present and what kind of signs are visible. You can join the project to add plant observations to this project. If you observe a ramarama plant with no evidence of thrips damage, you can fill out the *Thrips damage* field with *none*. Thrips are known to have population fluctuations and to be pests for a few years in a particular location then decline (Mound et al. 2022), so plants with no damage are also useful to observe. You can also tag me in observations and I will add them to the project. This should give us some better data on the threat to ramarama from greenhouse thrips.

Thanks to Ben Wright for showing me the thrips damaged plants and for additional information on the thrips and the threat to ramarama.

Link to project page on iNaturalist

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Cook Strait – Wellington's Baring Head NZPCN conference field trip

Matt Ward, NZPCN Council Member (mattdavidward@gmail.com)

As the 2026 NZPCN Conference progressed through mid-October in Wellington the weather proved to be what we might expect in spring during an El Nino phase, unpredictable and volatile. This meant that the planned field trips around the region were reshuffled, cancelled and adjusted, but not for the Baring Head group. As the trip leader I was keeping an eye on the weather forecast hour to hour to see if we might be lucky and get a window of hope. It was present at the start of the week then came and went as the week progressed. As announcements began for other trips, I crossed my fingers and gave none. The odds were against us, but we stayed true to course and were rewarded with a good collection of Wellington regional flora not always found elsewhere. Meeting down at Te Papa for 9:00am the rain was still falling and being blown in every direction by the odd gust here and there. I received a phone call wondering whether we could stop on the way out to buy a raincoat as none of the shops in town had yet opened…



Figure 1. Khyber Pass – a 'quick stop' to see an excellent example of *Brachyglottis greyi.* Photo Jesse Bythell.

We loaded up the vans and the weather seemed to be easing, with only one cancelled participant we were completely full. A quick stop to check our tyre pressures and on we went over the 'stairway to heaven' (Wainuiomata Hill, as the locals call it), the weather in the Wainuiomata river valley seemed okay, a little blustery, but not much to speak of as a Wellingtonian. First stop the coastal carpark at the valley's mouth, brief for H&S, and for some, a first glance of Baring Head, and the lighthouse. First plant stop, the legends of the region, the two remaining *Muehlenbeckia astonii* (Figure 2.) which are a couple of the oldest known, and let's be honest parents to many of those specimens found in various plantings around the city. We planned a 15-minute visit here to also show the most accessible *Brachyglottis greyi* (Figure 1.) after a short sojourn into the Khyber Pass knoll, this specimen was neighboured by *Festuca multinodis* (Figure 3). The visit was about 45 minutes and all in sundry were reluctantly rounded back up into the vans. Thankfully, at this point Tayla suggested she time-keep.



Figure 2. Khyber Pass—a legendary *Muehlenbeckia astonii* being appreciated by members of our group. Photo Jesse Bythell.



Figure 3. Khyber Pass—a sprawling example of *Festuca multinodis*. Photo Jesse Bythell.

Next stop, scree slope with North Island *Discaria toumatou*, yes, I know, as any Southerner will say, it's hard to get excited by our ground hugging somewhat hidden by the long grasses form, but nonetheless, they were enjoyed and photographed. This stop also provided a good collection of grey scrub species and several species of mistletoe. Timekeeper reminded us of time to move. On from there we popped around the corner to inspect a few riverbed species including the recently relocated *Lilaeopsis ruthiana*, some *Leptinella dioica*, and *Schoenoplectus tabernaemontani*.

Back to the vans and up to the lighthouse for lunch and a toilet stop. Well, it would have been if it had not been literally blown away by the last storm system, unfortunately a bit of an oversight. By now the weather was pretty good, so most folks sat outside enjoyed some sun and an almighty view of the city, Wellington harbour mouth and Fitzroy Bay. A couple of rock dwelling species were noted here, but I was not too keen for anyone venturing down slope as a gust could have been not good, and a long way up to climb.

Down to the west coast we went. Unfortunately, I had planned to show the group the boulder community species below the lighthouse but our access was not granted by the landowners, so we made do with the Fitzroy Bay boulders, beach, and wetland. Being our last stop it was a free for all exploration, with folks going left right and centre to find any species new to them. Mellissa kindly reminded me about the *Leptinella tenella* I had found in the area so we made a beeline for them, and there they were (Figure 4), still present and part of an unusual pebble swale wetland with several other modest species you would expect like *Lilaeopsis novaezeelandiae*, *Ranunculus acaulis* and *Azolla rubra*. Nearby, Melissa managed to find a witches broom on the tauhinu.



Figure 4. Dune Wetland – the last stop was popular with the group, looking at flowering *Ranunculus acaulis*, and *Leptinella dioica*, amongst other things. Photo Jesse Bythell.

Thanks to the timekeeper we managed to get everyone back to Te Papa for 4:30pm, so no flights were missed. Thanks everyone for a fantastic day in the field!

Some of the species noted during the trip:

Natives: *Aciphylla squarrosa* var. *squarrosa, Apium prostratum* ssp. *prostratum* var. *filiforme, Apodasmia similis, Asplenium appendiculatum* ssp. *maritimum, Asplenium flabellifolium, Austroderia toetoe, Azolla rubra, Brachyglottis greyi, Calystegia tuguriorum, Carex geminata, Carmichaelia australis, Centella uniflora* (new record), *Cheilanthes distans, Cheilanthes sieberi* ssp. *sieberi, Chenopodium triandrum* (new record), *Clematis foetida, Clematis forsteri, Colobanthus muelleri, Coprosma propinqua* var. *propinqua, Crassula moshata, Crassula sieberiana, Crassula sinclairii, Discaria toumatou, Eleocharis acuta, Epilobium hirtigerum* (new record), *Epilobium nummulariifolium, Festuca multinodis, Geranium brevicaule, Glossostigma elatinoides* (new record), *Hydrocotyle novae-zelandiae* var. *novae-zelandiae, Ileostylus micranthus, Isolepis cernua, Isolepis distigmatosa* (new record), *Korthalsella lindsayi, Leptinella dioica, Leptinella squalida ssp. squalida, Libertia ixioides, Lilaeopsis novae-zelandiae, Lilaeopsis ruthiana, Linum monogynum* var. *monogynum, Luzula banksiana var. banksiana, Melicytus crassifolius, Microtis unifolia, Microlaena stipoides, Muehlenbeckia astonii, Muehlenbeckia australis, Muehlenbeckia australis × complexa* (new record), *Oxalis rubens, Pellaea calidirupium* (new, previously suspected), *Pellaea rotundifolia, Pennantia corymbosa, Poa billardierei, Polystichum oculatum, Pseudognaphalium luteoalbum, Pyrrosia eleagnifolia, Ranunculus acaulis, Raoulia hookeri* var. *hookeri, Rubus schmidelioides, Rubus squarrosus, Rytidosperma racemosa* (solved ID), *Senecio lautus, Scandia geniculata, Shawia solandri, Spinifex sericeus, Styphelia nesophila, Tetragonia trigyna, Triglochin striata, Wahlenbergia ramosa, Zealandia pustulatum* ssp. *pustulatum.*

Adventives: *Acaena agnipila, Aira praecox, Allium triquetrum, Cakile maritima, Callitriche stagnalis, Centranthus ruber, Drosanthemum floribundum, Geranium sp.* (hot pink flower), *Glaucium flavum, Helosciadium nodiflorum, Juncus bufonius, Latuca serriola, Parietaria judaica, Paronychia brasiliana, Raphanus raphanistrum, Senecio glastifolius, Senecio skirrohdon, Vicia hirsuta.*

2026 NZPCN Conference Charity Auctions – How did we do?

Matt Ward, NZPCN Council Member (mattdavidward@gmail.com)

Kia ora folks. Thank you all for attending the conference in Wellington. It was an excellent assembly of skilled and interesting people which made the event very memorable. From what I could make out from the feedback I received from you the bidders, the items we received were more than appreciated. We had almost 100 items between the silent and live auctions.



Firstly, thank you so much to everyone who kindly donated items or delivered them on behalf of someone else. It really made for an interesting couple of auctions, without your generosity the auctions would not be as successful and fun as they were. In no particular order, I think you are all awesome by the way, thank you to Jane Gosden, Kev O'Donnell, Ian St George, Eleanor Burton, Kate McAlpine, Megan Ireland, Roy Slack, Louise Webster, Tim Park, Carol West, Heidi Meudt, Bill Campbell, Allison Knight, John Barkla, Alex Fergus, Anita Benbrook, Roger Steele, Robyn Smith, Leigh Strange, Catherine Beard, Melanie Newfield, Cara-Lisa Schloots and her mum, Melissa Hutchison, Moira Parker and Sonya Joy Parker, Ben Wright, Hamish Carson, Andrew Jinks and Grant Timlin. If I have forgotten anyone, my sincere apologies.

Secondly thank you to all of you who bid on the items, it's not the best of time financially for lots of us, so digging deep for such a good reason(s) is really appreciated. At this stage Bill and I think we have rounded up all of the bids, with just two at reminder stage and possibly a couple of items which may have been lost in the details. If you think you may have something you haven't yet paid for, please feel free to contact me or Bill at some stage. I hope everybody who was after an item managed to get something for themselves or to give as a gift for someone else.

So, I am very happy to say that amongst you all we raised a total of $3,587.00. which is superb!!

The funds you raised will be evenly split between our three trusts the 'David Given Scholarship', the 'John Sawyer Plant Conservation Fund', and now our latest trust 'He Pihi Kāuru'(see the October Trilepidea for details). That's almost $1,200.00 for each fund, fantastic, thank you all once again, AROHANUI, KIA KAHA!!!

News from the UNITEC Herbarium

Peter J. de Lange (pdelange@unitec.co.nz) and Campbell J. James (cjames@unitec.co.nz), School of Environmental & Animal Sciences, Unitec, Auckland, New Zealand

The Environment and Animal Sciences Biodiversity Pathway at Auckland's Mt Albert Unitec campus offers a Bachelor of Applied Science (B.A.Sci.) and, as of 2023, a Master of Applied Science (M.A.Sci.).

For these degrees, students undertaking environmental studies are taught a range of field skills, ecology and notably taxonomy. To aid with teaching field ecology and taxonomy, in 2001 the faculty started what was initially intended to be a 'small' teaching herbarium. However, student and staff research interests have seen that herbarium grow rapidly. In 2012, the herbarium was registered with Index Herbariorum with the code 'UNITEC'. de Lange & Blanchon (2018) gave notice that UNITEC had accessioned its 10,000th specimen, a lichen, *Usnea inermis*.

Following on from de Lange & James (2024) this is the yearly report of activities at UNITEC.

UNITEC: Herbarium founded 2001.

Index Herbariorum: UNITEC (Registered 2012).

Postal Address: Prof. Peter J. de Lange, Room 115-1040, School of Environmental and Animal Sciences, Unitec, Private Bag 92025, Victoria Street West, Auckland 1142, New Zealand

Physical Address: Unitec Campus, Building 115, 115-2032, Auckland, Mt Albert, Carrington Road, Gate 4

Staff: Professor Peter J. de Lange FLS (Curator) pdelange@unitec.ac.nz., Campbell James (Herbarium Technician) cjames@unitec.ac.nz.

Research Fellow: Andrew Marshall.

Research Associates: Adjunct Associate Professor Dan Blanchon FLS, Adjunct Associate Professor Mark Large FLS, Dr Matthew A. M. Renner FLS, Dr Ryan de Regnier.

Volunteers: Kaya Travan, Olga Levanova, Sharnar Salafai Brunt-McGlinchy, Tyson Price, Manaia Brunt, Daria Marchuk, Louisa McGinty, Dhrupal Patel, Ingitha Amarasinghe Arachchige, Dilini Uyanahewage, Apekshya Aryal, Shaazu Kokhar.

Access: By appointment only (email: pdelange@unitec.ac.nz)

Holdings: 14784 specimens (accessioned) including—as Kingdoms—1 Bacteria,1 Amoebazoa, 36 Chromista, 7848 Fungi, 6900 Plantae. This is a gain of 591 specimens on last year (de Lange & James 2025). There are a further c. 4000 specimens awaiting to be accessioned.

Types: UNITEC holds the primary types (Holotypes) of *Amandinea delangei*, *Buellia insularicola*, *Coenogonium goniocystosum* (Fig 1.), *Coenogonium hepatiphilum, Lithothelium kiritea*, *Megalaria crispisulcans*, *Ocellularia jacinda-arderniae*, *Pyrenula dalmatioides*, *P. largei*, *P. quadratolocularis* and *P. solomonii*. Isotypes of *Lecanora kohu*, *Leptospermum hoipolloi* f. *hoipolloi*, *L. hoipolloi* f. *procumbens*, *L. repo* and *L. tairawhitiense* are also held.

Exchanges: UNITEC exchanges with AK, B, F, HFN, MACB, OTA, SS, WELT.

Containment Status: UNITEC currently does not have containment status.

Scope

The Flora and Lichenized Mycobiota of New Zealand. UNITEC collections have an emphasis on the northern part of New Zealand, particularly the lichens of the Kermadec Islands, Northland, Kaipara (Mataia), Waitakere Ranges, urban Auckland, Auckland Regional Parks, Hauraki Gulf Islands (notable collections from Rangitoto, Motukaikoura and Tiritirimatangi), Waikato. There are also important collections of bryophytes, vascular plants and lichenized mycobiota from the Chatham Islands.

Invasive plants are well represented reflecting staff research interests and the courses taught by the faculty. The herbarium also holds DNA vouchers linked to the Applied Molecular Solutions Research Group (www.unitec.ac.nz/ams) and associated laboratory, and international lichen research consortia (PhyloRamalina, Lecanomics, Parsys). The earliest collections are those donated collections from 1965 (Judy Nicholson, mainly South Island), with other later donations from the 1980s and 1990s, before active collecting began in 2001.



Figure 1.The holotype of *Coenogonium goniocystosum* C.James as seen on 26 December 2025 prior to collection in the upper Waipurua Valley, southern tablelands, Rekohu/Wharekauri/Chatham Island (P.J. de Lange CH4647 & D. Boyle, UNITEC 15158).

Key collectors

Peter de Lange (c. 2500 (c. 1000 still to accessioned) algae, bryophytes, lycophytes, pteridophytes, flowering plants, fungi and lichens); Dan Blanchon (c. 1600 lichenized mycobiota (c.600 still to accession), bryophytes, flowering plants, fungi and lichens); Andrew Marshall (lichens) (c.3000 (1300 of these still to accession)); Campbell James (lichens, flowering plants), Rafael Medina, Sonia Molino and Mario Mairal (Blechnaceae, especially *Parablechnum*), Paul Bell-Butler (bryophytes, lichens),

Carol Elliott (nee Lockett) (lichens); Carol West (c. 300 lichens): Christy Reynolds (lichens): Orhan Er (lichens, vascular plants); Marley Ford (lichens, flowering plants); Jacqueline Margetts (flowering plants); Sue Wake (flowering plants); Leslie Haines (flowering plants); Neil Davies (flowering plants); Rick Kooperberg (lichens); Glenys Hayward (lichens); Jennifer Bannister (lichens); Allison Knight (lichens); Nathan Solomon (flowering plants); Jan Weaver (flowering plants); Vicki Sergeant (fungi); Hayley Nessia (fungi, lichens); Tim Martin (lichens); Robert Lücking (lichens); Bibiana Moncado (lichens); Judy Nicholson (nee MacDuff) (flowering plants); Linden Moyle (ferns).

The herbarium also holds important collections from Catherine Beard (Maung'Re Island—bryophytes, lichens), John Braggins (bryophytes), David Galloway (lichens), David Houston (Maung'Re Island - bryophytes, lichens), Thomas Emmett (Maung'Re—lichens), Matt Renner (bryophytes), Matt von Konrat (bryophytes), Mark Large (spores of New Zealand lycophytes and pteridophytes, pollen samples).

Critical voucher specimens are also held from past studies of the lichen diversity of New Zealand mangrove (*Avicennia marina* subsp. *australasica*) forests, pōhutukawa (*Metrosideros excelsa*), and the two species of *Lophomyrtus*; and lichens found in Auckland Council permanent monitoring plots (both continuous forest and urban bush fragments).

Original artwork of the holotypes of *Nephelolejeunea carcharias* and *Siphonolejeunea raharahanehemiae* drawn by M.A.M. Renner is also held.

History

UNITEC was founded in 2001 by Carol Elliott (nee Lockett) and Dan Blanchon. It is a teaching and research herbarium, supporting the studies of an active lichen group, as well as ongoing investigations of invasive and native plants. Students learn herbarium specimen collection and preparation in three different courses in the Bachelor of Applied Science, and students volunteer in the herbarium to assist with accessioning and curation. The herbarium supports taxonomy education, particularly in lichenology, mycology, botany, and biosecurity.

The herbarium focus on lichens was greatly encouraged by the late Dr David Galloway FLS, FRSNZ; he also contributed to its collections.

Herbarium Activities Summary 2026.

Accessioning

UNITEC specimens are curated using Specify 7. A large focus of this year's activities has been curation of the Herbarium electronic database, with the result that there are still 993 records to resolve (the electronic database accepts 14784 specimens whereas the handwritten accession book notes 15776). Most of that curation has been overseen by Herbarium Technician Campbell James who has also been tidying the electronic database so that UNITEC can be uploaded to GBIF and, ultimately the Australasian Virtual Herbarium.

Student Volunteers

Student volunteers have, as with last year (de Lange & James 2025) outpaced the number of collections that await mounting and databasing with the result that the backlog has been considerably reduced. Several students, notably Olga Levanova, her daughters and a friend of one of her daughters have completely reboxed the vascular plant collection (Fig. 2), updated the filing system to one more easily understood, and Olga (who had formerly worked in IT) set up an electronic filing system on a laptop she donated for this purpose (Fig. 3). Filing of specimens remains a focus, as we are running out of room. Also, this year we managed to get extra shelving for the vascular plant collection. The main focus will be on reboxing the lichenised mycobiota − long overdue. Four students enrolled in NSCI 8015 Taxonomic Methods (a post-graduate paper) as part of their internship assessment for that paper worked in the herbarium, assisting with mounting, filing, and boxing (under Olga's direction) or helping Campbell with the electronic database curation.



Figure 2. New shelves – vascular plant portion of the UNITEC vault, June 2026, an area now completely filled with newly boxed collections.

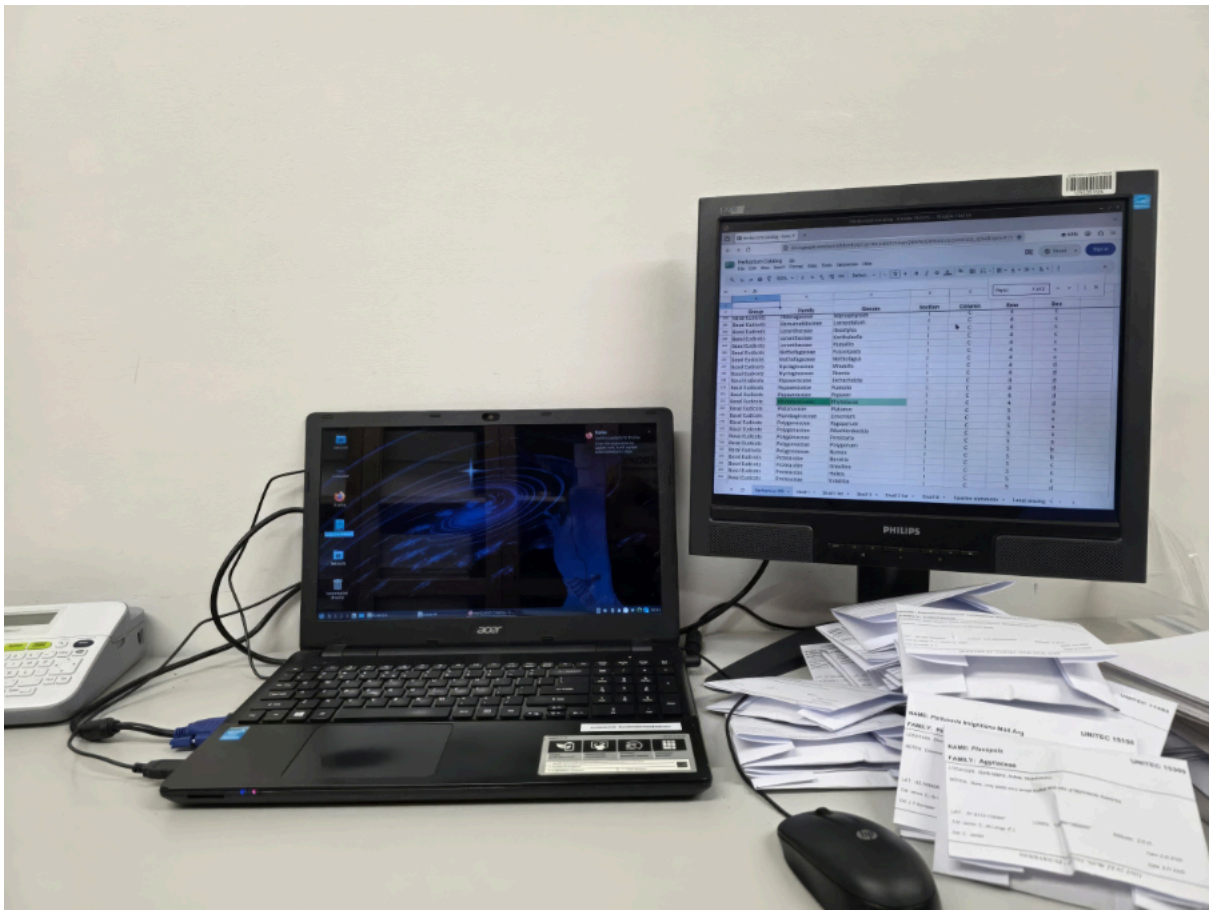

Figure 3. The electronic filing system developed by Olga Levanova.



Figure 4. Peter de Lange (August 2026) on Rangimata pointing out a plant of *Lepidium panniforme*, one of seven found that had survived from the January 2026 translocation.



Figure 5. Moropunga, a 0.68 hectare, low-lying (1m a.s.l.) island in Te Whanga Lagoon, Rēkohu/Wharekauri/Chatham Island, as seen in January 2026

Herbarium Research (2026 update)

Active research linked to the herbarium includes a revision of the New Zealand members of the lichen genera *Chrysothrix, Coenogonium*, *Collemopsidium* s.l., *Parmotrema*, *Pertusaria* (with Dr Jennifer Bannister), *Pyrenula*, *Ramalina*, the New Zealand members of the Peltigeraceae—notably the *Pseudocyphellaria crocata* complex and *Sticta*, *Strigula* s.l., the *Cladia aggregata* complex, and *Micarea*. A major focus over the last two years has been helping compile an Aotearoa/New Zealand wide listing of lichenized mycobiota for formal publication; this to be then used as a resource by the Department of Conservation for the upcoming New Zealand lichenized mycobiota threat listing. At the time of writing (13 November 2026) this list is now in press, due out any day soon. As with previous years we have been fortunate to be able to tap into and collaborate with lichenologists, Dr(s) Robert Lucking, Bibiana Moncada, and André Aptroot.

Indeed, their role in assisting our nation in lichenology was further augmented with the publication of a paper examining the *Pseudocyphellaria hookeri* complex (de Lange et al. 2026) published as part of a Festschrift to honour the 65th birthday of world-renowned lichenologist Prof. Dr. André Aptroot.

Flowering plants research on Chatham Island endemic vascular plants, which is ongoing, was augmented with collections made between December 2025 and February 2026 by Peter de Lange, who resided on the island. A range of new records were made, which whilst of great interest, has slowed down the projected revision of that island's vascular plant checklist (with Rowan Scott, Northland Regional Council). A major treatment of Aotearoa/New Zealand and Oceania *Pittosporum* (prepared under the aegis of Dr Lindy Cayzer) is now close to submission in Australasian Systematic Botany. Research on *Ripogonum* (with Dr John Conran), *Salsola* (with Prof. Sergei Mosyakin) and *Taraxacum* (with Dr Karst Meijer) is ongoing. Research into the pathogens associated with *Asparagus scandens* and *Selaginella kraussiana* is also ongoing, with voucher specimens from these studies lodged in the herbarium. Lichen checklists for New Zealand, the Kermadec and Chatham Islands groups are also being slowly prepared (slow because, as noted by de Lange & James (2025), a shift in our focus has been to finalise with Dr Dan Blanchon a formal national listing of Aotearoa/New Zealand Lichenised Mycobiota). Outside New Zealand, Herbarium staff continue to work with the Field Museum in research on the Cook Islands bryophytes and lichens, and New Zealand *Frullania*, with at least one paper on that complicated genus now close to submission.

Field Work (2026)

Peter de Lange in collaboration with the Chatham Islands Landscape Restoration Trust (between December 2025 − February 2026) undertook a survey of the vegetation, flora and mycobiota of islands within Te Whanga lagoon, Rēkohu/Wharekauri/Chatham Island. He also made collections of the naturalised flora of the Chatham Islands as part of a collective checklist synthesis for the islands intended to update the 2011 listing (see above). Whilst on the Chatham Islands Peter also assisted both Hokotehi Trust and Moriori Imi Settlement Trust with advice on the indigenous flora, and at the invite of the Taiko Trust visited the more remote parts of the Southern Tablelands, collecting during that expedition the holotype of *Coenogonium goniocystosum*. During January 2026 Peter together with Hokotehi Trust Henga Nurseryman Lorimar Albert and Chatham Islands Landscape Restoration Trust field ranger Hamish Tuanui-Chisholm undertook a translocation of the threatened endemic *Lepidium panniforme* to islands in Te Whanga lagoon. At least seven of these had survived in a follow up survey undertaken during August (Fig. 4). Whilst on the island Peter was also involved in advising on Chatham Islands restoration work, a role which has included botanical surveys of privately owned land on Rēkohu/Wharekauri/Chatham Island and, in collaboration with the Chatham Islands Landscape Restoration Trust, a survey of the vegetation of the karst islands of Te Whanga lagoon, Rēkohu/Wharekauri/Chatham Island. Between May and July 2026 Campbell James participated in field work in Sarawak, Borneo on an expedition lead by Assoc. Prof. Dr. Marleen Baling from the School of Environmental & Animal Sciences. During August, Peter de Lange, Campbell James, Rachel Klein, and Willem de Lange completed an assessment of Moropunga Island (Fig. 5, 6), Te Whanga, Rēkohu/Wharekauri/Chatham Island for the Chatham Islands Landscape Restoration Trust. Together with contributions from Dr Ryan de Regnier, a paper from that field work was submitted to *Perspectives in Biodiversity* (13 November 2026). Finally, in late September Peter de Lange, Campbell James and Ryan de Regnier (Fig. 7) working with students enrolled in NSCI 7105 Advanced Field Surveying of New Zealand Biota made collections of bryophytes, lycophytes, pteridophytes and lichenised mycobiota from Hooper's Bush, Mataia Farm, near Glorit, Kaipara and undertook a survey of Te Maika Sandspit, Ngunguru Harbour.

Herbarium Outreach (2026)

Three School of Environmental & Animal Sciences staff (two linked to UNITEC) presented at the annual Chatham Islands Festival of Science (August 11−14) held in the Den, Norman Kirk Memorial



Figure 6. Campbell James and Peter de Lange returning for the August 2026 survey of Moropunga – much colder conditions.

Park, Waiteki/Waitangi, Rēkohu/Wharekauri/Chatham Island. Peter de Lange gave a keynote paper at the onset of the conference outlining features of the Chatham Islands Flora, Taxonomic Issues, Biosecurity and Conservation Management, and ongoing work on mapping the terrestrial ecosystems of the Chatham Islands. He also took Julie Anne Gentor, Green Party Member of Parliament (Rongotai Electorate) to see *Pyrenula solomonii*, a seriously threatened, presumed Chatham Island endemic lichen, at the sole known location, Nikau Bush Conservation Area, Rēkohu/Wharekauri/Chatham Island (Fig. 8). Campbell James spoke on the saxicolous lichen mycobiota of Chatham Island karst systems (Fig. 9), and Rachel Klein presented on the nesting materials used by small Chatham Islands passerines (Fig. 10). Peter de Lange also gave evening talks to the Auckland Botanical Society on the Chatham Islands flora and to the Warkworth Branch of Forest & Bird about the karst flora of the Chatham Islands. Peter also participated in a regional threat listing of the indigenous vascular flora of the Bay of Plenty Region, a process lead by Wildlands consultancy (Fig. 11). In late November, Peter de Lange (panel chair), Campbell James, and Dan Blanchon, Andrew Marshall, researchers affiliated to the herbarium will be undertaking a threat listing for the Department of Conservation of the lichenised biota of Aotearoa New Zealand.



Figure 7. Bachelor of Applied Sciences Level 7 student James McKenzie and Dr Ryan de Regnier looking for mosses at Hooper's Bush, Mataia, Glorit, Kaipara during September 2026.

The Unitec Herbarium Facebook Group (2026)

A Facebook page created by Research Fellow Andrew Marshall in 2012 details the activities of UNITEC and associated items of interest. This year's news has continued the previous year's themes outlining research linked to the herbarium collections, publications, volunteer activities, items about specific herbarium specimens and other general news items about herbaria, mycology, and botany. The group has grown in 2026 to 780 members (up 180 from last year).



Figure 8. Member of Parliament Julie Anne Genter and Peter de Lange standing at the type locality of *Pyrenula solomonii* which is corticolous on the bark of a karamu hikoa (*Coprosma chathamica*), Nikau Bush Conservation Area, Rēkohu/Wharekauri/Chatham Island (August 2026).



Figure 9. Campbell James searching (successfully) for a potentially unnamed *Caloplaca sens. lato* (Teloschistaceae) on the limestone of Rangimata, Rēkohu/Wharekauri/Chatham Island, August 2026

Visitors (2026)

Dr Roseanne Ellis (Research Office, Unitec), Unitec Board of Governors, Martin Carroll (Unitec), Shijia Gu (University of Auckland) (Lichens), Dr Ajao Abdulwakeel Abu Aisha (Fabaceae)

Associated Journals

Perspectives in Biodiversity (https://www.unitec.ac.nz/epress/index.php/perspectives-in-biod-iversity/), *Perspectives in Biosecurity* (https://www.unitec.ac.nz/epress/index.php/category/publications/epress-series/perspectives-in-biosecurity/).



Figure 10. School of Environmental & Animal Sciences Lecturer Rachel Klein explaining nest construction of Chatham Islands passerines at the Festival of Science, August 2026.



Figure 11. Bay of Plenty Regional Threat Listing Panel taking a brief break from the listing process. The panel was hosted by Wildlands—an environmental consultancy with its head office based in Rotorua, the brainchild of Sarah Beadel and Willie Shaw. Input to the meeting also came from Elizabeth Miller (NZFRI Herbarium), Paul Cashmore (Department of Conservation), Angela McQuillan (Wildlands), and Peter de Lange (UNITEC Herbarium)—online.

Recent Publications linked to UNITEC collections (2026)

Boiko, G.; de Lange, P.J.; Antonenko, S.; Mosyakin, S.L. 2026: Updated type designations for names of three *Epilobium* (Onagraceae) taxa from New Zealand described by Allan Cunningham. *Telopea*, 30(2):169–179. https://doi.org/10.7751/telopea21796

de Lange, P. J.; Marshall, A. J.; Aptroot, A.; Blanchon, D. J. 2026. *Astrothelium* Eschw. (Trypetheliaceae) in Aotearoa / New Zealand. *Perspectives in Biodiversity*, 4(1): 1–8. https://doi.org/10.55457/pibdiv.004101

de Lange, P. J.; Heath, C. D.; James, C. J.; Marshall, A. J.; Tuanui-Chisholm, H. 2026. The terrestrial vegetation and biota of Rangimata / Shag Rock, Te Whanga, Rēkohu / Wharekauri / Chatham Island. *Perspectives in Biodiversity*, 4(1): 60–74. https://doi.org/10.55457/pibdiv.004105

de Lange, P. J., de Lange, W. P., Marshall, A. J. (2026). The vegetation associations and flora of Hi'Tara, a shell cay, Te Whanga, Rēkohu / Wharekauri / Chatham Island. *Perspectives in Biodiversity*, 4(1): 83–96. https://doi.org/10.55457/pibdiv.004107

de Lange, P.J.; Moncada, B.; Blanchon, D.J.; Ranft, H.; Lücking, R. 2026: The *Pseudocyphellaria hookeri* clade (Peltigerales): a species pair-photosymbiodeme speciation complex? Plant and Fungal Systematics, 71(1):164–191. https://doi.org/https://doi.org/10.35535/pfsyst-2026-0013

de Lange, P. J., Scott, R. K., James, C. J., McKenzie, D. J. M., Baling, M., Klein, R. R., Butcher, K., Tapp, A., Rear, S., Marshall, A. J., Chappell, R., Hamish Tuanui-Chisholm. (2026). The vegetation, flora, mycobiota and vertebrate fauna of Motuhinahina, a limestone island in Te Whanga, Rēkohu / Wharekauri / Chatham Island. *Perspectives in Biodiversity*, 4(1): 31–59. https://doi.org/10.55457/pibdiv.004104

Ford, M.; Cameron, E.; Champion, P.; de Lange, P.J.; Townsend, A.J.; Forester, L. 2026: Conservation Status of Indigenous Vascular Plants in Northland Te tūnga whāomoomo o ngā tupu i Taitokerau. Technical Report, Northland Regional Council, Whangarei. 93pp.

Ford, M., Dorsman, Y., Shepherd, L., Warden, J., de Lange, P. J. (2026). First record of *Youngia japonica* (L.) DC. (Asteraceae: Tribe Cichorieae) in Aotearoa / New Zealand. *Perspectives in Biosecurity*, 11: 41–51. https://doi.org/10.55457/pibs.01103

James C.J.; Blanchon D.J.; de Lange P.J. 2026: A revision of the *Coenogonium luteum* (Coenogoniaceae) complex in Aotearoa | New Zealand, with new records and new species, and a note on *C. tomentosum*. *Ukrainian Botanical Journal*, 83(2): 73–86. https://doi.org/10.15407/ukrbotj83.02.073

Michel, P.; Edwards, E.; Hitchmough, R.; de Lange, P.J.; Cieraad, E. 2026: Simpson's paradox in the red list index: aggregation masks biodiversity declines and gains. *Journal for Nature Conservation*. https://doi.org/10.1016/j.jnc.2026.127497

Mosyakin, S.L.; Albach, D.; Boiko, G.; Shiyan, N.M.; de Lange, P.J.; Kellerman, J.; McNeil, J.; Raven, P.H.; Verloove, F. 2026: Hidden herbarium treasures in a wartime Kyiv: An appeal for international collaboration, digital preservation, and support. *Taxon*, 75(3):e70158. https://doi.org/10.1002/tax.70158

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de Lange, P.J.; James, C.J. 2024: News from the UNITEC Herbarium. *Trilepidea 246*: 5-11

de Lange, P.J.; James, C.J. 2025: News from the UNITEC Herbarium. *Trilepidea 258*: 17-22

de Lange, P.J.; Moncada, B.; Blanchon, D.J.; Ranft, H.; Lücking, R. 2026: The *Pseudocyphellaria hookeri* clade (Peltigerales): a species pair-photosymbiodeme speciation complex? Plant and Fungal Systematics, 71(1):164–191. https://doi.org/https://doi.org/10.35535/pfsyst-2026-0013

UPCOMING EVENTS

If you have events or news that you would like publicised via this newsletter please email the Network (info@nzpcn.org.nz), prior to the published copy deadline, with details of meetings, field trips or other events taking place during the following month or later. The deadline for copy for the following month's *Trilepidea* is at the top of the front page of each issue.

If you intend to participate in one of the advertised botanical society meetings or field trips, please check with the relevant society beforehand to confirm that the published details still stand.

Iwitahi Working Bee & Native Orchid Weekend

Friday, December 4th - Sunday , December 6th
At the Iwitahi Reserve off SH5 (Napier - Taupo)

Starts Friday after 4pm
Ends Sunday Lunchtimeish

Includes Meals and 2 Nights' Accommodation at Sika Lodge
(bunk room style)
Light /Moderate Track Maintenance, Weeding etc.
Orchid Identification, Photography, And Discussions On Site

$125+ / -PP
THE MORE THAT COME
THE CHEAPER IT GETS

We would expect to see Calochilus, Chiloglottis, Gastrodia,
Thelymitra and Pterostylis species in flower or bud

If you are unable to attend for the full weekend but would like to join us at the reserve or prefer to organise your own accommodation, please let me know so we can keep an eye out for you

To register your interest, contact me by FB Messenger me or email - tobymarris@hotmail.com



Auckland Botanical Society

Field Trip: Picnic potluck in December.	**Details:** To be confirmed.

Waikato Botanical Society

Field Trip: Saturday 28 November to Kinloch (Combined with Rotorua Botanical Society). **Meet:** Rotorua carpark at 8.00am (phone for car-pooling) or at Kinloch near the marina by 9.00am. **Grade:** Medium.	**Leader:** Chris Bycroft, email chris.bycroft@wildlands.co.nz, ph. 021 394 096.
Field Trip: Saturday 5 December to Ruapuke Beach.	**Contact:** Tim Newton, email tim@greenfootprint.co.nz, ph. 021 103 5755.

Rotorua Botanical Society

Field Trip: Saturday 28 November to Kinloch (Combined with Waikato Botanical Society). **Meet:** Rotorua carpark at 8.00am (phone for car-pooling) or at Kinloch near the marina by 9.00am. **Grade:** Medium.	**Leader:** Chris Bycroft, email chris.bycroft@wildlands.co.nz, ph. 021 394 096.

Hawke's Bay Botanical Group

Field Trip: January 2026 (details to be confirmed).	**See our Facebook page https:**//www.facebook.com/p/Hawkes-Bay-Botanical-Group-100064874703326/ for updates. Email Alan (possumsnest@xtra.co.nz) if you would like to join the group mailing list. All are welcome.

Wellington Botanical Society

Field Trip: Saturday 5 December to Gollans Valley, Mt. Cameron. **It is essential to contact the trip leader by Thursday 3 December if attending.** **Meet:** southern end of Muritai Road by the cycle hire shop at 9:30am.	**Leader:** Lara Shepherd, lara.shepherd@tepapa.govt.nz, 027 363 5854.

Nelson Botanical Society

Field Trips/Meetings: Please refer to the website: https://www.nelsonbotanicalsociety.org/trips-meetings.

Canterbury Botanical Society

Field Trips/Meetings: Please refer to the website: https://canterburybotanicalsociety.org.nz/canterbury-botanical-meetings-field-trips for current details.