

NEW ZEALAND BOTANICAL SOCIETY

NEWSLETTER

NUMBER 158

December 2024



Smilax argentea (L.) Thunberg 1804

President:	Anthony Wright
Secretary/Treasurer:	Ewen Cameron
Committee:	Bruce Clarkson, Carol West, Murray Dawson
Address:	c/- Canterbury Museum Private Bag 4744 CHRISTCHURCH 8154
Webmaster:	Murray Dawson
URL:	www.nzbotanicalsociety.org.nz

Subscriptions

From 2025 Subscribers will be able to choose their sub based on receipt of either a digital (PDF) or hard copy version of the Newsletter.

Ordinary/institutional digital sub \$23, reduced to \$20 for prompt payment
Ordinary/institutional hard copy sub \$33 reduced to \$30 for prompt payment
Student digital sub \$13, reduced to \$10 for prompt payment
Student hard copy sub \$23, reduced to \$20 for prompt payment
Family digital sub \$33, reduced to \$30 for prompt payment
Family hard copy sub \$38, reduced to \$35 for prompt payment.

Back issues of the Newsletter are available in hard copy at \$8 each. Since 1986, the Newsletter has appeared quarterly in March, June, September and December.

New subscriptions are always welcome, and these, together with back issue orders, should be sent to the Secretary/Treasurer at the postal address above or at nzbotsoc@canterbury-museum.com.

Subscriptions are due by 30 April for that calendar year. Existing subscribers are sent an invoice with the December Newsletter for the next year's subscription, which offers a reduction if paid by the set date.

Deadline for next issue

The deadline for the March 2025 issue is 25 February 2025.

Please post contributions to:
Lara Shepherd
Museum of New Zealand Te Papa Tongarewa
169 Tory St Wellington 6021

Send email contributions to lara.shepherd@tepapa.govt.nz Files are preferably in MS Word, as a Microsoft Word document. Graphics can be sent as TIF JPG, or BMP files; please do not embed images into documents. Alternatively, photos or line drawings can be posted and will be returned if required. Drawings and photos make an article more readable so please include them if possible.

Cover Illustration

Sporadanthus ferrugineus by Eleanor Burton.

NEW ZEALAND BOTANICAL SOCIETY
N E W S L E T T E R
NUMBER 158 December 2024

ISSN 0112-6865 (Print) 2230-3502 (Online)

CONTENTS

New Zealand Botanical Society News

Subscriptions for 2025.....	2
Announcement of Allan Mere Award 2024.....	2
Response from Allan Mere Award recipient at the Hui ā Mere	6

Regional Botanical Society News

Auckland Botanical Society	7
Rotorua Botanical Society	9
Wellington Botanical Society	10
Other Botanical Societies	12

Notes and Reports

George Irwin (1910-71), New Zealand collector of Samoan mosses	13
AK herbarium news	17

Publications

Publications received	20
-----------------------------	----

NEWS

New Zealand Botanical Society News

■ Subscriptions for 2025

Your committee has now met and reviewed the delivery mechanisms for the Newsletter and the changes to the subscription structure that result.

As reported in the June Newsletter, we had 35 responses to the questionnaire about how people would like to receive their Newsletters in the future. 65% of those would be happy with pdf publication. Several members made a plea for continued hard copy publication and we know from correspondence about missing issues that the libraries that have subs want the hard copy Newsletters. We have very few student members (none in some years) and they tend to lead to issues as they change address frequently and don't notify us.

As a result an analysis of the financial outcome of several scenarios was undertaken. Grateful thanks to Canterbury Museum accounting staffer Simon Xue for helping with this.

The Committee has resolved to:

- Offer members the choice of digital or hard copy subs from 2025
- Set the digital sub at \$23, reduced to \$20 for prompt payment
- Set the hard copy sub at \$33 reduced to \$30 for prompt payment
- Set the student digital sub at \$13 reduced to \$10 for prompt payment
- Set the student hard copy sub at \$23 reducible to \$20 for prompt payment
- No longer offer a 'subsidise-a-student-sub' donation option on the invoice as we have very few student members and it has basically been a general donation to NZBS funds
- Set the family digital sub at \$28, reduced to \$25 for prompt payment
- Set the family hard copy sub at \$38, reduced to \$35 for prompt payment.

Enclosed with this Newsletter is your invoice which requires two actions:

- complete and return by post or scan and email, and
- transfer payment to the NZBS bank account noting your membership number.

To ensure you receive future newsletters without delay, please complete these actions by 28 February 2025. Note that prompt payment discounts do not apply after 31 January 2025.

Your committee hopes this hybrid subscription model provides the flexibility that members who responded to the questionnaire requested. Thanks again to all members for your support of the society.

Anthony Wright, President, NZ Botanical Society

■ Presentation of Allan Mere Award to Dr Jessica Beever

At an Auckland Botanical Society evening meeting held at Unitec Natural Sciences on 2 October, the Allan Mere for 2024 was formally awarded to Dr Jessica Beever. The following korero delivered at the hui provides background to the award and the recipient:

Tena koutou, tena koutou, tena koutou katoa
Kuia, koroua, nga mihi nui ki a koutou
Kuia Rangatira, Whaea Jessica, tena koe
Tena koe kaiwahakahaere Dan

Ko ahau te tumuaki o Te Whare Taonga o nga Pakihi Whakatekateka o Waitaha
Ko Anthony Wright ahau
Tihei mauriora!

Nga mihi nui ki a koutou

I'm delighted to be here today to celebrate the life-time achievements of Dr Jessica Beever by making the 2024 presentation of the Allan Mere to her.

But first, a sincere thank you to the Auckland Botanical Society for hosting this event for the New Zealand Botanical Society. It's a special pleasure to have past recipients of the Allan Mere here with us, and I'd like to acknowledge Ewen Cameron, Paul Champion, John Braggins and tonight's speaker, Peter de Lange.

Of course, as some of you will remember, Jessica has also accepted the award of the Mere once before – more of that a bit later.

It's also great that Jessica's daughter Rosemary – a willing participant in scientific research trips to faraway places from a very early age – can be with us tonight, and we're sorry that pressure of work means son Graham, who would have dearly liked to be here, cannot.

Before proceeding, I'll give a little background to the award. The Allan Mere was donated by Dr Lucy Moore in 1982 to commemorate the 100th anniversary of the birth of Harry Howard Barton Allan, first Director of Botany Division of the former DSIR, and author of Volume 1 of the *Flora of New Zealand*. Dr Lucy Moore was herself of these parts for the earlier and later stages of her life, and with the other Lucy (Lucy Cranwell) was part of the small group who were the founding members and organisers of Auckland Botanical Society.

The Allan Mere is awarded annually by the New Zealand Botanical Society from nominations made by Regional Bot Socs or individual members to persons who have made outstanding contributions to botany in New Zealand. The Mere is housed at the Allan Herbarium at Manaaki Whenua Landcare Research in Lincoln, just south of Christchurch. The New Zealand Botanical Society Committee has awarded the Allan Mere for 2024 to Jessica Beever and it is my pleasure to present this award to a redoubtable woman whom I believe I first met in a Stage 1 Botany Lab at the University of Auckland, a significant number of years ago.

The nomination was made by Dan Blanchon for the Auckland Bot Soc and Owen Spearpoint for the Wellington Bot Soc, supplemented by letters of support from the Waikato Bot Soc, the Taranaki Bot Soc, the Bot Soc of Otago, Barbara Parris, Peter de Lange, John Braggins, Barbara Hammonds and Wendy Nelson. I particularly liked Barbara Parris's brief and pithy message of support for the



Jessica Beever receiving the Allan Mere from Anthony Wright .

nomination: 'I vote yes!!! [three exclamation marks] for Jessica - having botanised with her since the 1960s I can vouch for her many talents'.

Usually, one of the especial pleasures of the nomination and award process is learning so much more about botanical enthusiasts I thought I already knew pretty well.

In Jessica's case, there were only a few points in her letter of nomination that were new to me, but I'll give you a fuller account.

Jessica (then Spragg, of Spragg's Bush in our beloved Waitakeres) developed an interest in the natural world during her teens while attending Adult Education trips to Mt Taranaki and the mountains of the Central North Island. She went on to complete bachelor's and master's degrees in Botany at the University of Auckland, the latter based at the DSIR in Mt Albert. In 1969, newly married to Ross Beever, she moved with him to the United Kingdom to continue her research career and undertake a PhD in plant physiology at the University of Leeds.

Upon the couple's return to Aotearoa, Jessica became a Lecturer at the University of Auckland (which is when we met) and then a Research Associate of Manaaki Whenua – Landcare Research. Her life-long career in bryology had begun. Some 120 published papers later, she is based at the Manaaki Whenua Tamaki campus where she continues working part-time on two moss families towards the modern eFlora treatment of New Zealand Mosses. These are very detailed and significant treatments of the genera and species including taxonomic histories, keys, full morphological descriptions, habitats, recognition features, and distributions – for both native and naturalised species.

Her papers cover inaugural accounts of the moss floras of specific places – often northern islands, such as the Kermadecs, Poor Knights, Chickens, and Little Barrier. Others cover taxonomic revisions and the naming of new taxa.

Jessica developed collaborations with overseas researchers early in her career, and has worked closely with British, Dutch, American and Japanese colleagues, and especially with Australian bryologist Ilma Stone.

In 1992, bryologist Allan Fife, also working at Manaaki Whenua but based at Lincoln, named a new endemic moss genus *Beeveria* in her honour.

Jessica has been a member of the Auckland Botanical Society since 1968 and served as President of the New Zealand Botanical Society from 1996 to 2001. During that period she oversaw the transfer of the award of the Mere from Landcare to the NZ Bot Soc, and in fact, drafted the new Rules for the award included in the leather-bound Allan Mere Book of Record. As first President under this new regime, she herself presented the Allan Mere to Hugh Wilson in 1999, Bruce Irwin in 2000, and Neill Simpson in 2001.

She was a long-time member of the Offshore Islands Research Group, documenting mosses from many of Aotearoa's northern offshore islands. She has contributed more than 9,000 specimens to herbarium collections nationally and internationally, while her total packeted collections number over 12,000 specimens, with the balance still held in her working herbarium, but gradually being donated to public institutions to ensure their permanent availability to future workers.

Jessica is also an enthusiastic and talented teacher, passing on her wealth of knowledge to successive generations. Over the past 45 years, she has given numerous lectures or workshops on mosses – always meticulously prepared – to some 10 conferences, at least 11 John Child workshops, several Forest & Bird branches, and a range of Bioblitz events.

Jessica has also brought the presence of mosses into the sphere of the wider public through contributions to popular publications such as the *Natural History of Rangitoto Island*, and *The Waitakere Ranges – Nature, History, Culture*.

In summing up, for over four decades Jessica Beever has been collecting, researching and publishing on New Zealand mosses. One of very few bryologists in New Zealand, she is one of only two writing the new moss eFlora. She is well-liked and much respected throughout the motu (and in bryological circles overseas), and is an asset on any scientific field trip. The joint ABS and WBS nomination, supported by others, is to recognise her very considerable contribution to the botanical understanding and wider appreciation of New Zealand mosses.

At the outset, I said Jessica had already accepted the Allan Mere once before. So there's a bit of whakapapa to be explored. Another sentence in the nomination letter reads "It is time Jessica was nominated for the award to sit alongside her late husband Ross as a recipient".

The occasion I was referring to was the posthumous award of the mere to her late husband Dr Ross Beever in 2010. Ross's citation reads "For more than 40 years, Ross unravelled botanical mysteries in his quest to understand and protect native plant diversity. As a mycologist and expert on northern flora he rescued *Pennantia baylisiana* from possible extinction; described the link between truffle-like fungi and ground-feeding birds; and identified causal agents of disease in the iconic endemic species cabbage tree and kauri".

Thus, Ross and Jessica become the first husband and wife duo to be separately awarded the Allan Mere. I was delighted to see, also, that Ross and Jessica have been jointly honoured by the naming in 2012 of the containment facility at Manaaki Whenua Tamaki as the "Beever Plant Pathogen Containment Facility".

Further to the theme of whakapapa, Ross, who was President of, and a leading light in the Auckland Botanical Society for many years, followed in the footsteps of his father Jim to claim the only father and son Presidency of this Bot Soc, thus far.

So, long may the Beevers keep Beavering away at Botany and other good works!

Thank you all for coming to do honour to Jessica today, and thanks again to President Dan and the Auckland Botanical Society for hosting the event, and all those who made and supported the nomination.



Jessica and daughter Rosemary after the presentation, with previous Mere recipients (from left) John Braggins, Peter de Lange, Paul Champion, Ewen Cameron.

I'd now like to read out the formal citation entered in the Allan Mere Book of Record:

Dr Jessica Beever

Since her teens, Jessica has been drawn to the natural world. Following post-graduate studies overseas, she returned to Aotearoa and joined Manaaki Whenua, commencing a life-long career in bryology. Amongst the very few bryologists in the country she is one of only two writing the new Moss eFlora.

Jessica is an enthusiastic and talented teacher, a national and international collaborator, an outstanding and much published taxonomic researcher, and a good friend and respected colleague to many - at work, in the field, and in life.

2024

At this point in the proceedings, I normally remind recipients that it was one of Lucy Moore's rules that the Mere be kept safe at the Allan Herbarium, and only "let out" for the presentation ceremony. However, Jessica knows that that rule has been broken at least once! Jessica, you do get to keep an inscribed certificate, together with a bound set of nomination and announcement papers.

Congratulations to you Dr Jessica Beever - I have the greatest pleasure in presenting you with the Allan Mere for 2024.

Anthony Wright, President, New Zealand Botanical Society

■ **Response from Allan Mere Award recipient at the Hui ā Mere**

Tēnā koe Matua Anthony

Tēnā koutou katoa

Pikau mai ō koutou tini mate

E nga mate e moi, e moi.

It seems especially appropriate we begin in te reo, considering the nature of this beautiful taonga, which Lucy Moore has gifted to a long line of botanists.

Wouldn't she be pleased to know of the long line – some of whom are in the room – and some of whom are no longer with us, including Ross – and so I address them also in my mihi. "Pikau mai" bring them – literally on your shoulders, but in fact, in our memories.

I would like to tell you a story about Lucy Moore's moss collecting.

She's known best as a vascular plant botanist, but she was also interested in mosses.

She was fortunate in having an excellent mentor – G.O.K. Sainsbury – whose vast herbarium is now in WELT. So a quick email to WELT at Te Papa the other day and Bridget told me they hold 668 moss specimens collected by Lucy Moore.

And at AK, Auckland Museum, Dhahara was able to tell me, there are 108. Lucy would be amazed that such information is now so readily at our finger tips – and so much else besides.

One of the specimens Lucy sent to Sainsbury was something she collected on Mauitaha, one of the small islets and stacks west of the Chicken Islands (Marotiri), which was ultimately identified as new to New Zealand, *Ischyrodon lepturus* in the Fabroniaceae.

She was there with Lucy Cranwell, doing a botanical survey in the early 1930s.

So when Ross and I visited the Chickens, almost exactly 50 years later in New Year 1982, camped on Mauimua (Lady Alice Island) with OIRG, the Offshore Islands Research Group, I was hopeful it might be refound – and I was pretty sure no one would have been looking for it in the intervening half century!

I didn't make the intrepid journey to the islets myself, in our little Oirgonaut, but two members of our party came back with it, following my instructions – they were Dave Court (Adrienne Stanton's brother), and Anthony Wright!

I have special thanks to those who nominated me for this award, and those who supported the nomination, some of whom are here tonight:

John and Thelma Braggins, and Peter de Lange.

And, as we heard, the nomination came from the Auckland Botanical Society, my companions on many congenial field trips – so thank-you all!

Jessica Beever, Auckland Botanical Society Meeting, 2 October 2024

Regional Botanical Society News

■ Auckland Botanical Society

June meeting

For Plant of the Month, Dan Blanchon, now the curator at the Auckland Museum Herbarium, spoke of the difficulties facing herbaria when taxonomists can't agree as to the status of various genera of plants. His current dilemma is what to do about *Kunzea* – does he lump them all under *Kunzea ericoides*, or does he split them into several species?

Zara Skuse, one of our Lucy Cranwell Grant recipients, spoke of her study subject of exploring the role of logs as a substrate for native seedlings. Examples were given of quite mature trees with their roots astride the remnants of well-decayed logs, and it was surprising that towai was one of the commonest trees to start life in this way.

June field trip

The board-walked loop in Smiths Bush, Northcote, was a very good choice for a winter walk. This city reserve, bordering the northern motorway, has grown up on volcanic tuff, and so has a different composition from the usual kauri forest of the region. Kahikatea and puriri are the commonest trees, with one long-fallen puriri tree now supporting five very large trunks. For fern-lovers the abundant *Asplenium lamprophyllum* (yes, we did teach new-comers the old oil-of-wintergreen trick) and *Arthropteris tenella*, were of interest. A short walk took us to the nearby Akoranga Reserve, which is an example of what can be done to an area of regenerating weed-infested land when a local team take on weed control.

July meeting

In preparation for the August field trip, for the Plant of the Month Maureen Young spoke of the often-association of *Notogrammitis rawlingsii* with hard beech. Lucy Cranwell recipient Pin Jia Chan, a PhD student, shared with us his studies on the impacts of kauri dieback on plant communities and carbon sequestration within kauri forests of the Waitakere Ranges.

Co-speaker, Ewen Cameron, had to postpone his talk on the Singapore Botanic Gardens due to ill-health, so Ben Goodwin ably filled the gap with a comprehensive discussion on the swamps and wetlands in and near the city, from the days of early European settlement to the present day.

July field trip

After days of rain and a bad forecast, the planned trip to the Mangawhai Harbour walkway drew only 8 participants, but the weather was kind in the morning with only a shower at the end of the walk. The walkway was built by a group of largely retired Mangawhai residents and proved to be ideal for the weather conditions when compared with muddy bush tracks. The boardwalk passed through a monoculture of mangrove forests, but a gravel pathway had good saltmarsh vegetation growing along the edges. This proved to be a learning opportunity for a young fellow who was only familiar with the bush flora, and back at the carpark he pointed out two plants of *Psilotum nudum* growing in a garden there. A convivial lunch was enjoyed at a local café.

August meeting

This meeting was a zoology/botany presentation, with Dave Houston from DOC detailing the Tawaki Project that has taken place over the last two summers, when a team has sailed to the remote Bounty and Antipodes Islands to study two of New Zealand's crested penguins – the erect-crested and the rockhopper. Drones were used on these steep-sided islands to count the numbers of birds of several species, and also the various kinds of seals. Bounty Island is basically a flat-topped, steep-sided rock with very few plants being obvious. Fortunately, using a drone revealed the presence of several clumps of a *Lepidium* species that Peter de Lange had asked the team to locate. The Antipodes Island is much larger with a good covering of vegetation that makes progress on foot rather difficult. A few photos showed some of the mega herbs for which the Subantarctic Islands are famous.

August Field Trip

A very interesting kauri ridge on private property at Brick Bay, near Sandspit, was visited on a damp day. The aim of the morning's walk was to locate a population of *Notogrammitis rawlingsii*, growing, as usual, on mossy mounds located on decaying hard beech trunks. Also in similar habitat were small plants of *Schizaea bifida*. Two species of "kauri greenhoods", *Pterostylis agathicola* and *P. brumalis* (the latter with dying flowers) were also present, as were the gnat orchid, *Cyrtostylis oblonga*, with translucent pinkish flowers, and non-flowering *Acianthus sinclairii*, *Bulbophyllum pygmaeum* and *Corybas oblongus*. As the rain was setting in it was an easy decision to have lunch at the Sandspit Café rather than a picnic at Brick Bay. Only 3 intrepid participants completed a wet afternoon walk to Brick Bay, with *Hebe macrocarpa* (flowering), *Adiantum diaphanum* and *Veronica plebeia* being the highlights.

September meeting

PhD student from Auckland University, and formerly from Ukraine and St. Petersburg, Vladislav Kholostiakov, is studying the microbial community present in the tiny seeds of pohutukawa (*Metrosideros excelsa*). The seeds need to be crushed to prevent them from germinating on agar, which proved to be difficult with such minute seeds, as no beneficial endophytes will be present on media. The question he asked was, "How can such a tiny seed harbor such a diverse microbial community?"

September field trip

Peter de Lange led a walk in the Kauri Point Centennial Park, which is part Scenic Reserve and part QE II Open Space Covenant. It is on the northern slopes bordering the Waitemata Harbour, and leads down to Kendall Bay, from Birkenhead. The local restoration group has done some inappropriate plantings which have naturalized somewhat, but a range of nationally and regionally threatened/uncommon taxa are also present.

October meeting

Anthony Wright, President of the New Zealand Botanical Society, travelled up to Auckland to present Jessica Beever with the Allan Mere for her long association with the study of mosses. Peter de Lange then followed with a presentation on his 2011 visit to McCauley Island, the second largest of the Kermadec Islands. His talk explained the logistics of a difficult landing on the island, the history since its rediscovery in 1789 and the flora, notable fauna and vegetation associations of the island.

October field trip

Waikumete Cemetery, New Zealand's largest cemetery, is well-known for the spring display of wildflowers around the oldest graves. It is rather disappointing that the area is not managed as would

be desired, though, given its size it is perhaps understandable. The display of two shades of purple *Babiana angustifolia* flowers were much photographed, but the rampant growth of the nuisance member of the Iridaceae, *Aristea ecklonii*, covered large areas. The afternoon walk took place in the gumland scrub in the SW corner, and although to the general public this looks scruffy, to the participants it was a treasure trove of the plants that can survive in those infertile conditions.

November meeting

The plant in Geoff Davidson's Plant of the Month talk, was actually in the plural, as he outlined his efforts on his property at Oratia to replace exotic weeds with indigenous "weeds".

Ewen Cameron then spoke on visits to the Singapore Botanic Gardens where over 10,000 species grow in an area of 82 ha. The orchid garden is especially exciting, with so many beautiful tropical species thriving in this small country that is only 137 km north of the equator.

November field trip

Two untracked ridges were explored off Conical Peak Road, north of the Dome forest, near Warkworth. The participants enjoyed a wonderful day, with the most exciting finds being new sites for the mistletoe, *Ileostylus micranthus*, a flowering plant on the most northerly site for *Pterostylis cardiostigma*, and one of only two sites north of Auckland of the filmy fern, *Hymenophyllum bivalve*.

Auckland Botanical Society

Auckland Botanical Society PO Box 26391, Epsom, Auckland 1344

President: Dan Blanchon

Secretary: Kirsty Myron

aucklandbotanicalsociety@gmail.com

■ **Rotorua Botanical Society**

September Field Trip Whangaroa Inlet, Rotoma

Lake Rotoma normally has an underground outlet but the Whangaroa inlet, near the main road and settlement is a rare overground flood outlet. High lake levels in last year have resulted in the death of many trees, especially in this area. Recent dry spells though have exposed much bare shore and it was hoped to explore this. Unfortunately, heavy rain overnight and over the last few days resulted in high lake levels again and shores were not accessible.

The first part of our route was a track along a powerline route where a low canopy is maintained. This allowed views of the main forest canopy and provided habitat for a range weedy plants. The main forest canopy was tawa and kamahi with emergent rimu, kahikatea, rewarewa, pukatea, and miro with māhoe, kohekohe, nīkau, kiekie, supplejack and kawakawa as the main subcanopy components. The more open areas had a very mixed canopy of plants such as karamu, putaputaweta, wineberry, mahoe and manuka. Near the shore edge grey willow had been dealt to. Here there was blackberry and a wide diversity of herbs and seedlings of plants such as tītoki, mangao, karaka, privet, and brush wattle. Herbs included foxglove, toatoa, *Hydrocotyle tripartita*, several sedge species and many as yet unidentifiable herb seedlings from the recent water recession.

At the head of the inlet we headed around into tawa forest near the north shore, towards a beach at beginning of the arm. In this area weed species such as radiata pine, cherry, cotoneaster and dogwood that had (mostly) been dealt to. But much of the forest, although rather open, was intact, often with little understorey. Species of interest here were toropapa, *Streblus heterophyllus*, *Rubus schmedelioides* and ramarama (which was being monitored for myrtle rust). Near our destination blackberry swathes and dense low shrubs, along with the high lake level forced us to turn back and retrace our route.

October Field Trip - Millar QEII

A large crowd of about 20 neighbours and 10 local BotSoc members gathered for the opportunity to visit the recently fenced QEII covenant. Although the fence around the 30 ha had been completed 18 months ago, the last 3 or 4 goats and deer had only recently been removed. The main forest was dominated by tawa with emergent rimu, rewarewa, kahikatea and the odd mataī. The effects of the

fencing were already apparent with kawakawa to 3 m and a wide range of seedlings becoming apparent including, mangao, miro, titokī, nīkau, pukatea, fuschia and wineberry.

We traversed the area on a series of trap lines at first across several gullies where pukatea and nīkau were present with supplejack and patches of dense tree ferns, often *Dicksonia squarrosa* in gullies and young silver fern on the slopes. The first traverse ended where a pine block had been felled just before the fence was closed. Here the less common *Solanum aviculare* with its paler flowers was evident at the forest edge along with many weedy species including *Carex divulsa*, *Selaginella kraussiana* and interesting plants such as *Geranium gardneri*, *Nertera depressa* and *N. dichondrifolia*.

After lunch at a lookout just outside the fence we returned, initially along a flat ridge through a tanekaha stand with miro and willow-leaved maire to a former clearing with a large memorial kauri and our first orchids, *Pterostylis banksii* in flower and remains of *P. trullifolia* and *Acianthus sinclairii*. We then descended on a ridge. Near the gully bottom we passed through mamaku with *Corybas hypogaeus* and *C. vitreus* in the frond debris. Then scrambling across a log on the valley floor we spotted *Peperomia tetraphylla* and soon saw many more plants nearby as we headed towards our original entrance point "Hobbit hole" on the fence.

November Field Trip - Motu River revisited

On 2-3 November 8 RBS members travelled to Maraenui near the Motu River mouth in Eastern Bay of Plenty for our annual botanical hikoi with local landowners to explore parts of the area seldom visited by botanists. On Saturday we took a short 5 min jet boat ride up the Motu River from SH 35 road bridge and spent the day in one of the larger blocks bordering the Motu River and Mangaroa Stream. The BotSoc group and 3 members of local iwi broke into groups with 2 groups heading up Mangaroa Stream and the 3rd heading up a ridge and along main river terraces. The vegetation was predominantly northern rātā/tawa-rewarewa forest with areas of hard beech-tanekaha-kānuka forest on lower ridges and spurs. Kānuka forest and scrub occupied the lower river terraces. Species of note included a few *Olearia cheesmanii* scattered along Motu River edge along with two silver beech trees at 20m asl. *Jovellana sinclairii* was common on stream banks with a *Metrosideros carminea* and specimens of *Lophomyrtus bullata* near stream edge.

On the Sunday a smaller group spent the morning botanising the coastal edge vegetation behind the shingle beach at SW end of Maraenui Beach. Pōhutukawa forest dominated throughout with ngaio and flax on the forest edge and areas of kānuka scrub and harakeke flaxland present in places on higher cliffs. A typical range of native and exotic species were present along the forest edge and on the shingle beach including *Calystegia soldanella*, *Pelargonium inodorum*, *Senecio diaschides* and much *Cortaderia selloana*. - PC.

FUTURE EVENTS

December 1	Pohokura, Napier-Taupo highway
February 2	Linton - Te Matai Rd
March 1	Mangapapa

President: Sarah Beadel 021 924476; Sarah.Beadel@wildlands.co.nz

Secretary: Elizabeth Miller (07) 343 5613 rotorua-botanicalsociety@gmail.com

Web Page: www.wildland.co.nz/botanical.htm

■ **Wellington Botanical Society**

May Field Trip - Te Ara Paparāangi & Gilbert Bush Reserve, Newlands

Twenty-three botsoccers made the trip to Gilbert Reserve to walk the recently-created Te Ara Paparāangi track. We started from the carpark at the end of Tamworth Crescent where the track began by sidling along the top of the scarp above the Hutt Road. The botany at this end of the track was not as spectacular as the view, with regenerating scrub and many areas of recent native plantings interspersed with numerous weeds.

As we travelled further along the track towards the head of the gully the trees became larger and the understorey filled out, although apparent plantings were scattered all the way along the track. We noted a large tawa (*Beilschmiedia tawa*), the only tawa seen, a large multi-trunked akapuka (*Griselinia lucida*) and several large ngaio (*Myoporum laetum*) and kānuka (*Kunzea robusta*). Some concerning weeds in this older forest included a liquorice plant (*Helichrysum petiolare*) climbing into the canopy and a large *Prunus* above the track.

We then carried on to where the track crossed several deep, dark gullies, where the bryologists found plenty to examine and there were several large kōtukutuku/tree fuchsia (*Fuchsia excorticata*). We passed a steep bank beside the track with three *Blechnum* species (*B. novae-zelandiae*, *B. procerum* and *B. fluviatile*), *Epilobium nummulariifolium* and what we decided was a sun orchid (*Thelymitra*) before turning back. On the return journey Leon headed 5 metres downhill from the track to confirm a small kiekie (*Freycinetia banksii*). Most of us took a shortcut back up to Tamworth Crescent where we noted several additional weed species.

June Field Trip- Heke Reserve, Huntleigh Park, Orleans-Makererua Reserve

Rather ambitiously 19 of us set out to botanise three reserves in Ngaio, which made a nice loop. We started in Heke Reserve, which is a steep hillside between Ngaio and Crofton Downs. It is kohekohe forest, with a good understorey, though very weedy around the edges especially where it borders on private gardens. At the entrance at the end of Collingwood Street, just above the Ngaio Railway Station, there are two large tōtara. There was some discussion as to whether these were planted or remnant, and after some asking around it was concluded that they were most likely remnant. We did see a small number of *Streblus heterophyllus* near the track—we were not sure whether they were planted or naturally occurring.

Next was Huntleigh Park Reserve, which goes up the hill between Crofton Downs and Ngaio and is accessed from the play centre near the end of Silverstream Road. This again is kohekohe forest with a good understorey of ferns etc. There was a small grove of mature mataī near the top of the hill. Again, there were some *Streblus heterophyllus*, and several different climbers. Then we moved on to Makererua Street Reserve, which has a more mixed canopy, still kohekohe but also tawa. This reserve was most notable for a very large pukatea, which had some convenient spider webs on the trunk which had caught several of the windborne seeds. Seedlings were also present.

June Workbee – Te Mārua Bush

Along the SH2 boundary we planted 16 trees sourced from the UH F&B nursery to fill the gaps caused by dieoff of the original plantings or some vehicle damage. In light rain we surveyed the rest of the bush for weeds and to gauge future work. We found and removed some tradescantia on the Pony Club boundary. We noted a fallen tree on Twin Lakes Road ~ 60 m south of the stile was noted for clearing and replanting. We collected two bags of rubbish and weeds for the GWRC staff to remove. Trees planted were *Pseudowintera axillaris*, *Kunzea ericoides*, *Olearia*, *Nestegis cunninghamii*, *Sophora microphylla*, *Pittosporum eugenioides*, *Pseudopanax arboreus*.

July Field Trip - Denton Bush forest remnant

This bush remnant near Waikanae is on an old alluvial river terrace surrounded by dairy farmland. It contains four natural springs which all emerge and meet within the remnant, then flow out across the farmland. The remnant does not appear to have been logged—it has some of the biggest pukatea and tawa you will see. The remnant is entirely within the flat river terrace and on the transition between the freer draining tōtara, mataī, ribbonwood forest and the wetter kahikatea, pukatea type forest. It is a regionally significant forest remnant as both forest types are regionally critically endangered. The remnant being on the transition between these critically endangered forest types increases its importance. The dominant canopy trees of the remnant are *Beilschmiedia tawa*, *Laurelia novae-zelandiae*, *Rhopalostylis sapida*, and *Didymocheton spectabilis*.

There were a few weed species of concern around the margins of the remnant: *Iris foetidissima*, *Tradescantia fluminensis*, and one plant of *Clematis vitalba*. Further into the forest the understorey was devoid of exotic species and dominated by the shrubs and saplings of *Piper excelsum*, *Rhopalostylis sapida*, *Geniostoma ligustrifolium* var. *ligustrifolium*, *Melicytus ramiflorus*, *Pseudopanax arboreus*. The

groundcover ferns *Icarus filiformis*, *Parapolystichum glabellum*, *Hypolepis ambigua*, *Diplazium australe*, *Lecanopteris pustulata* and the sedge *Carex uncinata*.

Noticeable and a testament to the pest control were the carpets of kohekohe fruit and a few on the trees - also five-finger saplings. One question raised by the owners was, would the regenerating nīkau seedlings and sapling out-compete the broadleaved species resulting in the slow trajectory of the remnant to a dominant canopy and monoculture of nīkau as can be seen at Paraparaumu Scenic Reserve? Certainly, in places there was an almost 100% cover of nīkau seedlings and saplings.

FUTURE EVENTS

December 5 & 7 Rātā-viewing walk, Lower Hutt
January 18-26 Summer Camp, St Arnaud

Wellington Botanical Society

President: Kate Jordan

Secretary: Paul Bell-Butler wellingtonbotsocsecretary@gmail.com <http://wellingtonbotsoc.org.nz/>

■ **Other Botanical Society Contacts**

Waikato Botanical Society

President: Antoinette van der Weerden

Website: <http://waikatobotsoc.org.nz>

Secretary: Linda Watson (watsonlinda092@gmail.com)

Trip Organiser: Kerry Jones km8j1s@gmail.com

Taranaki Botanical Society

Contacts: Barbara Hammonds 06 7597077; Email: barbara_ha@outlook.com

Janica Amore 06 7520830. Email: waiiongona@clear.co.nz

Hawke's Bay Botanical Group

<https://www.facebook.com/Hawkes-Bay-Botanical-Group-590670161140095/>

Manawatu Botanical Society

Jill Rapson: Massey University. Ph (06) 350 5799 Ext 7963; G.Rapson@massey.ac.nz

Whanganui Museum Botanical Group

Our meetings are held every two months on the second Tuesday, alternating with 'Nature Talks' (where the Whanganui Botanical Group has merged with Birding Whanganui and the Whanganui branch of Forest and Bird), which are held on the third Tuesday in even-numbered months. It is intended to continue with monthly botanical field trips to which members of the other two groups are invited.

President: Clive Higgie (06) 342 7857 clive.nicki@xtra.co.nz

Secretary: Margi Keys 0274 481 581 wbotgp@gmail.com

Canterbury Botanical Society

President: Melissa Hutchison 0210415797

president@canterburybotanicalsociety.org.nz

Secretary: Fay Farrant 0273327482

secretary@canterburybotanicalsociety.org.nz

General contact:

info@canterburybotanicalsociety.org.nz

Wakatipu Botanical Group

Chair: Neill Simpson (03) 442 2035

Secretary: Rebecca Teele 027 314 2610

wakatipubotanicalgroup@gmail.com

Botanical Society of Otago

Chair: Gretchen Brownstein, BrownsteinG@landcareresearch.co.nz www.bso.org.nz

Secretary: Angela Brandt, c/- Department of Botany, University of Otago, PO Box 56, Dunedin.
bsotago.ac.nz

NOTES AND REPORTS

- **George Irwin (1910–71), New Zealand collector of Samoan mosses**

Rhys Gardner

Early life

George Irwin was born in Timaru on 21 December 1910¹. He was given the forenames of his schoolteacher father, Major George Irwin, but was always known simply as George. The family moved to Christchurch in c. 1915. His father rose to positions of authority at Beckenham, Shirley, and Methven and was later remembered by at least one ex-pupil as a “grand headmaster” (*The Press*, 29 April 1957 p. 3) who, after the Methven Public School burnt down in 1916, restored his pupils’ spirits by planting trees and starting a library.

George attended Christchurch Boys High School during 1924–28. He appears not to have distinguished himself academically but was active in rugby and athletics (and later got a university Blue in boxing). He matriculated at the end of 1928 (*Press* 21 Jan 1929 p. 11) and began tertiary study. He wrote about this time: “I completed my degree at Canterbury University College during the depression years of the ‘thirties. It was an unusual degree because, in an attempt to get away from the grim earnestness of science, I had in my third year switched to the arts” (Irwin 1965: 1).

He was also attending Christchurch Teachers College², which had just moved into a new building on Peterborough Street (it had a roll of c. 300 students and contained New Zealand’s first ‘Normal School’). His first teaching positions were at Beckenham in 1929, Waltham (for a very short time, because a local excess of teachers meant that “job rationing” was in place), and Cashmere. Then, in what may have been a deliberate shift towards smaller ‘country schools’, he took positions successively at Kaituna (1933–34), Takamatua (1934–35), Lyttelton (1935–6), and Kairuru in the Abel Tasman district (February 1936).

In February 1936 George Irwin went to Fiji: “I was beginning to wonder what six years university study had qualified me for when I saw an advertisement in the Education Gazette. A graduate was wanted by His Majesty’s Colonial Government of Fiji to teach English, French, history, mathematics, and chemistry...As this strange assortment of qualifications happened to be mine and probably would never be asked for again, I raised a loan to send a cable [of application]” (Irwin 1965: 1).

His success in getting that position was followed by more good luck—early the next year, returning on the *Niagara* for a second round of teaching, George met Frances “Judy” Judd, who was also going to teach in Fiji (Irwin 1965: 1; ³). They were married on 11 June 1937 at Suva’s Holy Trinity Pro-Cathedral. For the next several years they lived in Fiji, teaching at Suva, enjoying Fijian culture, and exploring the countryside. George had received a B.A. in 1934 and had then enrolled at Canterbury University

¹Our subject, Major George Irwin (21 Dec 1910–23 Feb 1971) was the second child of Mary Margaret Lambert (1886–1982) and Major George Irwin (1881–1941). The latter was a son of Andrew and Jane Irwin, who came to New Zealand from Corbridge-on-Tyne in Northumberland, England (*Evening Star*, 10 Dec 1935 p. 9).

²A group photograph by James Thomson of Christchurch, titled “Probably Training College Students 1930” <https://canterburyphotography.blogspot.com/2013/06/> shows a relaxed-looking George Irwin in its front row.

³ Frances “Judy” Cora Greta Judd was born at Ohinemuri on 14 April 1908. An obituary for her father (*Northern Advocate* 12 July 1947 p. 8) relates that Philip Arthur Judd, a Boer War veteran, was born in Paisley, Scotland on 11 September 1880. Mrs Judd, née Elin Kristina Prytz, was born in Sweden in 1879; she died 25 December 1972 at Whangarei.

College for a Master of Arts degree in history. In Suva he finished writing his thesis and was awarded the degree in January 1938⁴.

The Irwins returned to New Zealand at the end of May 1940. In July 1940 George took up a Senior Secondary Assistant post at Granity District High School in Westland. Teaching was a “reserved” occupation in wartime New Zealand but on 14 February 1941 he was able to join the Royal NZ Air Force, as an Education Officer. At Miramar in Wellington ‘Flying Officer Irwin’ taught maths and science to RNZAF trainees, and also took after-hour classes, probably largely in history and English.

Despite that, a different kind of life called: “When the war was over, all we wanted to do was to live again among open-hearted people as far from cities as we could get” (Irwin 1965: 2). And so the Irwins went together to teach at two small Maori Schools in the North Island, at Anaura Bay on the East Coast (May 1946 to June 1947) and Te Whaiti in Urewera country (July 1947 to February 1948).

In February 1948 George Irwin was asked to go to Samoa as Principal of the Teachers Training College at Apia (and where Judy would be its infant-teaching specialist). Eight happy years in Samoa followed. George wrote of his admiration for the Samoans and “the exuberance with which they do the things they like doing, their fierce pride, and above all...the poetry of their animal spirits”⁵.

Samoa and plant-collecting

In their last period of Samoan teaching, from 1953 to 1955, the Irwins found relief from Apia’s dripping heat and the “sound of teachers teaching, and the endless ‘you show me, please’”, in a cottage among cinnamon trees on the edge of the forest at Afiamalu, three thousand feet up in the mountains behind Apia: “A rough road flanked by clay cuttings, curtains of mile-a-minute, and green-carpeted rocks climbed the ridges behind Vailima...it snaked up past a shanty half-hidden by banana palms, and children like dolls among the huge leaves of the *ta’amu*—and through the ragged fringe of man’s dominion into the silent forests of the mountains (Irwin 1965: 107–8).

Here, of his own volition, George Irwin began to collect mosses. He obtained the help⁶ of Edwin Bartram, the great American expert on Pacific mosses, who soon wrote his collection up (Bartram 1957). Bartram said that he had a “complete series” of Irwin’s 400 numbers in his herbarium (now at Harvard), all from the island of Upolu, except for one from Savai’i. This material contained several new records and one new species, *Endotrichella irwinii* (Fig.1; ⁷).

⁴ George Irwin’s thesis has no Acknowledgments so it is unclear who directed his historical research.

⁵ “Often in the Training College I used to fill in odd corners of a day with tales from Homer, Stevenson or Radio Newsreel. Achilles was ever our hero. The students suffered with him when he was *musu* [‘cross’, in the sense of stubbornness and resistance], cheered with delight as he chased Hector round the walls of Troy, and murmured with approval when he showed his respect to Nestor. Achilles, they said, should have been a Samoan chief because he does all the things just like the Samoan people do.” (Irwin 1965: 181–2).

⁶ Presumably New Zealand’s George Sainsbury, or a botanist at Kew, put Irwin in touch with Bartram. For the life and work of the latter see Crum (1966).

Irwin’s Samoan material is mentioned by Auckland Museum’s botanist Robert Cooper in the compilation by Lyon et al. (1971: 701, as “M. J. Irwin”). Earlier, on p. 20 of the Museum’s Annual Report for 1959–60, Cooper had claimed that “In August [1959] Mr. G. Irwin of Henderson Valley presented a fine collection of New Zealand mosses identified by the late G. O. K. Sainsbury. There is no such collection in AK (D. Ranatunga, pers. comm. 2024).

⁷ Bartram’s herbarium is said to have gone to the Farlow Herbarium at Harvard. However, the online database of the New York Botanical Garden herbarium (accessed 23 March 2024) indicates that it holds “*Irwin 199*...type of *Endotrichella irwinii*”. This agrees with the protologue (and AK 117194 is a syntype). Why the type should be at New York rather than Harvard is unknown (G. Tocci pers. comm., 3. 2024).

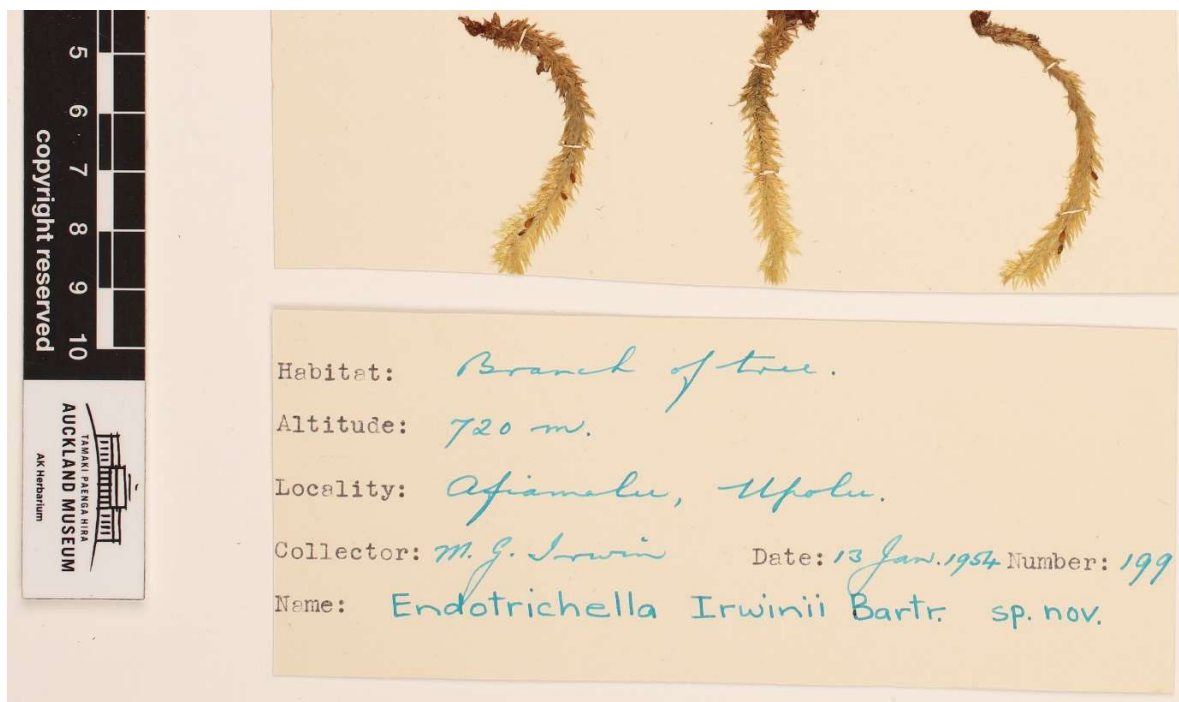


Fig. 1 Label of AK 117194 (*Endotrichella irwinii*) showing handwriting of George Irwin.

In AK (herbarium of the Auckland War Memorial Museum) there are 221 *Irwin* specimens, all from Upolu, the earliest dated 7 June 1953 and the latest 3 Oct 1954. Additionally, in WELT (herbarium of the National Museum of New Zealand Te Papa Tongarewa, Wellington) there are three *Irwin* specimens from Upolu. (There is also one from Niue (M010914, coll. 4 May 1955), of *Hypopterygium tamarisci*, apparently a new record for the island). In CHR (Allan Herbarium, Landcare New Zealand, Lincoln) there are c. 280 *Irwin* specimens from Upolu and one from Savai'i; most were collected in 1953 or '54). According to Bartram (1957: 15) Irwin also intended to send specimens to the herbarium of the Bishop Museum. At present (29 March '24), only two specimens of his appear on that herbarium's database (one being *Irwin* 199, an isotype of *Endotrichella irwinii*).

In January 1954, on one of his forest explorations, George Irwin saw an unfamiliar tree: "it was middle-sized, with small decussate leaves that stood out from the branches...it grew on the very edge of the canyon and leaned out alone into the giddy sunshine. I watched this brave little tree through the seasons, and gathered its flowers [April '54] and fruits [Dec '54] with a lasso. I sent these to Kew together with strips of its smooth brick-red bark and bunches of its distinctive leaves."

It proved to be a new species of *Syzygium*, and its description as *S. hebephyllum* by Kew botanist Ronald Melville contains the kind of mention so pleasing to collectors: "It is entirely due to his [Irwin's] willing co-operation in collecting flowers, fruits and range of foliage specimens that I am now able to describe this rare tree" (Melville 1955: 293). The epithet does not relate to the genus *Hebe* but reflects Melville's interest in evolution and leaf ontogeny, the tree having a distinct juvenile foliage phase. Irwin's collections were all made in 1954 from the canyon lip at Afiamalu, where there were two adults and three juveniles (Melville 1955). Some other collecting detail is provided by Whistler (1988), including the location of duplicates (none of which are in New Zealand) and the few collections that have been made subsequently.

Later years

Near the end of 1955 the Irwins returned to New Zealand. They built a small house in Turanga Road, high in Auckland's Waitakere Ranges, a quiet, forested location that undoubtedly reminded them of their Afiamalu cottage. But despite the abundance of bryophytes in the magnificent Spragg Bush right

on their doorstep George Irwin made no more moss collections. He did not join the Auckland Institute and Museum or (it seems) the Auckland Botanical Society.

Both George and Judy continued their teaching for some time (the Electoral Rolls listing George as a teacher in 1960 and a retiree in 1969). In 1965 George's book about Samoa appeared. He died just as his second book, a biography of the English literary figure Samuel Johnson, went to print⁸.

George and Judy had no children. George died on 23 February 1971. He was survived by his wife and his two sisters Ngaire and Mollie. His will, which had been drawn up in 1962, left his property entirely to his wife. It asked that "my body be cremated and the ashes strewn at the base of the largest kauri on our section" (Archives New Zealand, FL40269426). The will mentions no bequest to augment Spragg Bush, but this was done later, presumably by his widow. At least some of this donated land would be the entry to the bush off Turanga Road, the section numbered no. 28 Turanga Road⁹.

The Electoral Rolls show Judy ("Frances Irwin") living at Turanga Rd until at least 1981. The last years of her life were spent at the Selwyn Retirement Home in Hillsborough, Auckland, where she died in 2002.

Acknowledgements

I am grateful for help on genealogical and other family matters from Jessica Beever, Mark Smale, and Jane Teal of Christ's College Christchurch. Thanks also to the New Zealand Defence Force (Personnel Archives and Medals) for efficiently providing a copy of Irwin's RNZAF record and to Archives New Zealand for a copy of Irwin's Education Department salary cards. At the Auckland War Memorial Museum, Martin Collett, Pia Gahagan and Dhahara Ranatunga researched for me several aspects of Irwin's collecting. Genevieve Tocci of Harvard Universities Herbaria made a specimen search there.

References

Bartram, E. B. 1957. Mosses of Upolu, Western Samoa. *Occasional Papers of the Bernice P. Bishop Museum* 22: 15–30.

Crum, H. A. 1966: A tribute to Edwin B. Bartram. *The Bryologist* 69: 124–134.

Irwin, G. 1965: *Samoa, a teacher's tale*. Cassells, London.

Irwin, G. 1971: *Samuel Johnson, a personality in conflict*. University of Auckland Press.

Irwin, G. Unpublished. *The relationship between Canterbury and the West Coast during the most critical period of the sixties*. Canterbury University College. Thesis for M.A. in History, submitted 1935. <https://libcat.canterbury.ac.nz/Record/357103>

Melville, R. 1955: A new *Syzygium* from Samoa. *Kew Bulletin* 2: 293–295

Whistler, W. A. 1988: A revision of *Syzygium* (Myrtaceae) in Samoa. *Journal of the Arnold Arboretum* 69:167–192.

⁸ Irwin (1971) is a short biography of Johnson. Unexpectedly, its introductory section contains a thank-you to botanist Robert Cooper for obtaining reference material. Like the Samoan book, this biography is a very readable one—the number of drafts (now in the National Library of New Zealand) that went into the making of it reflect a truth so dear to teachers of English, that hard writing makes easy reading.

⁹ Jessica Beever (pers. comm., 14 May 2023) relates that she knew the Irwins in her childhood, and that they built their cottage "on the section on the inside corner of the right-angle bend, over the road from our bach at no. 25 Turanga Road. They purchased (then, or later) more than one section, one adjacent to their corner section and opposite our place, and one on our side of the road, next to us... [I think] they gave a section to the Spragg Bush reserve, on their side of the road...there is nothing on the ground to indicate it, but that donated section would be the access way through to Spragg Bush".

■ AK Herbarium news (July 2023- June 2024)

Yumiko Baba and Dan Blanchon

Tāmaki Paenga Hira Auckland War Memorial Museum

The Tāmaki Paenga Hira Auckland War Memorial Museum herbarium (AK) is located on the landmark hilltop of Pukekawa/ Auckland Domain, Auckland, New Zealand. AK is one of the three largest herbaria in New Zealand, and is the only regional herbarium funded by the region's ratepayers via the Auckland Council, whereas the other two (Te Papa (WELT) in Wellington and the Allen Herbarium (CHR) in Canterbury) are government-funded institutions. AK's collection encompasses native and exotic flora of wild origin, with a geographical focus given to Auckland, the northern regions of New Zealand, and the South Pacific.

Staff

AK went through a significant staff changeover in 2023-2024. Ewen Cameron, the curator for the last 30 years, retired with the grand send-off (Fig. 1) at the end of June and rejoined us as a research associate. Ewen has been instrumental in the development of collection database and digitisation of AK's collection while he also led research on the naturalised plants and offshore island flora in the Auckland region. He is one of the biggest contributors to our collection and collected over 17,000 specimens over his career. In May 2023, we marked an exciting new era by welcoming the new curator, Dan Blanchon, a New Zealand lichen and vascular plant specialist. Straight into the role, Dan has been part of the new natural science gallery renewal project, which is scheduled to open in 2025.



Figure 1. Rebecca Bray, Manager of Natural Sciences, presents Ewen Cameron with a farewell gift, a high-resolution image of the Holotype of *Pittosporum rangitahua* E.K.Cameron et Sykes. MC, Tom Trnski, Head of Natural Sciences, looks on.

Wendy Nelson, New Zealand's leading phycologist and the 2020 Nancy Burbidge medallist, joined the team as a Research Fellow in June 2023. The position will be effective for two years. Wendy has been

unofficially involved in the curation of AK's algal collection for a number of years. We are thrilled to gain her insights for future acquisitions and the research direction of our algal collection.

The museum's backlog cataloguing programme has been on a short hiatus since April 2024, while Frances Duff, the long-term cataloguing technician, is taking a break from the herbarium. In the meantime, we are now in an enormous debt of gratitude to our skilful volunteers, who continue supporting a range of curatorial activities, and therefore, our cataloguing and digitisation activities do not completely halt. Our team of volunteers consists of retirees, early-career botanists, and tertiary students.

John Braggins, our Research Associate and liverwort expert, was awarded the Auckland Museum Medal in June 2024 to recognise his long-term services and contribution to the museum. Congratulations John!

Our current Botany team consists of the following people:

- Curator: Dan Blanchon
- Associate Curator: Yumiko Baba
- Collection Manager: Dhahara Ranatunga
- Assistant Collection Manager (part-time): Zara Skuse
- Collection Technician (part-time): Darrel S. Jeffries (across the Natural Science departments)
- Research Fellow: Wendy A. Nelson
- Research Associates: John E. Braggins, Ewen K. Cameron, Rhys O. Gardner, Peter J. de Lange, Matt A. M. Renner and Mike D. Wilcox.
- Volunteers: Currently, 16 active volunteers engage in various herbarium tasks, including imaging, mounting vascular plants and bryophyte-lichen packets, cataloguing, and filing.
- Summer students 2023-2024: Campbell James (AK Lichen Name Index and nomenclatural update) and Amanda McIvor (Museum's fibre specimens).



Figure 2. Herbarium staff present at Ewen's farewell include front row from left; 5th Yumiko Baba, 6th Frances Duff, 8th Dan Blanchon and back row from left; 3rd Zara Skuse, 7th Ewen Cameron and 8th Daryl Jeffery.

AK's involvement in GBIF and UNESCO projects

AK continues to contribute our data to the Global Biodiversity Information Facility and Australian Virtual Herbarium/Atlas of Living Australia. Our data is updated first on the museum's Collections Online website as new accessions are databased, and then periodically updated onto the above data aggregates. To date, 309,831 of our records have been published on GBIF and AVH/ALA. The specimen images for the newer accessions (post-2015) are readily available on our Collections Online website, and 9,364 specimen images are uploaded to GBIF.

AK and SUVA (Fiji) herbaria have collaborated to support SUVA's digitisation (cataloguing and imaging) programme since 2021, first funded through GBIF between 2021 -2023. We have recently been funded by UNESCO to continue our efforts to advance SUVA's digitisation efforts.

Research and fieldwork

AK, together with the museum's wider Natural Science team, co-hosted a BioBlitz event with Ngāti Kuri in Te Pahi, North Island, New Zealand. This BioBlitz was carried out with the aim of biodiversity stocktaking in the relatively under-surveyed areas and training Ngāti Kuri rangers and the next generation of botanists in biodiversity collection activities (Fig. 3).

Dan continues to work on an update to the New Zealand lichen checklist, revisions of the lichen genera *Chrysothrix*, *Cladia* and *Parmotrema* for New Zealand, developing mycoherbicides for the invasive plant species *Asparagus scandens* and *Selaginella kraussiana*, and researching the possibilities of using fungal biofilms to biodegrade asbestos.

Yumiko continues working with Fijian flora. She conducted fieldwork in Viti Levu in 2022, collecting some *Elaeocarpus* species and general flora in the scope of revising the taxonomy and conservation accounts of Fijian *Elaeocarpus*.



Figure 3. Dan Blanchon (left in both pictures) delivers training at a Bioblitz community day (left) and ranger training session (right).

PUBLICATIONS

■ Publications Received

Wellington Botanical Society Bulletin 59 September 2024 Articles on when to plant if restoring native forests, forest survey at Kiripiti Scientific Reserve, Ōtaki Plain, Rātā Walk, moa in California, NZ native timber specimen board, plant ID by scent, taste or touch.

Wellington Botanical Society Newsletter September 2024 Upcoming trips and talks, awards available, QE2 National Trust update, Friends of Central Park, Ōtari update, Percy Scenic Reserve news, the vandals are at the Hutt, fern book review, trip reports for Te Ara Papararangi & Gilberd Bush Reserve, Newlands, Heke Reserve, Huntleigh Park, Orleans-Makererua Reserve, Te Mārua Bush workbee, Denton Bush forest remnant.

Auckland Botanical Society Newssheet September 2024 Upcoming trips and talks, books for sale.

Auckland Botanical Society Newssheet October 2024 Upcoming trips and talks, kōwhai flowering in Auckland, ID of foliage in the headdress of Ngā Wai Hono i te Pō, *Cussonia spicata*, books for sale.

Auckland Botanical Society Newssheet November 2024 Upcoming trips and talks, *Ileostylus* update, Friends of Symonds Street Cemetery Working Bee, books for sale.

Canterbury Botanical Society Newsletter September 2024 Upcoming trips and talks, talk report on Flora of the Dolomites, plants of the month *Schoenoplectus tabernaemontanii*/kāpūngāwhā and *S. californicus*.

Canterbury Botanical Society Newsletter October 2024 Upcoming trips and talks, talk report on ground-dwelling arthropod movement and predation pressure across habitat boundaries along a climate gradient, trip report for gardens of South Canterbury, Will Reinders article, plants of the month *Arthropodium candidum* and weedy asparagus.

Canterbury Botanical Society Newsletter November 2024 Upcoming trips and talks, Waimakariri Environmental Award Winners Miles and Gillian Giller, talk report on dryland kānuka regeneration, trip report for hidden treasures of the Ashburton Plains, article on taking action on invasive species, exotic plant of the month – awful Arums.

Nelson Botanical Society Quarterly Newsletter Autumn and Winter 2024 Trip reports for Pearse Resurgence, Shedwoods Bush, Fisherman Island and Brook Sanctuary, talk reports on *Dactylanthus*, *Aciphylla* and threatened plants of Mohuia/Golden Bay.

Botanical Society of Otago Newsletter 103 Upcoming trips and talks, Chair and Secretary's notes, fire response of spiders and plants at Earthquakes Reserve, talk reports on plant diversity under native and exotic forests, members' night and fungi, symbiosis and the power of lichens, trip reports on Frasers Gully, Ben Rudd's Hut, Aramoana Ecological Area and Okia Reserve.

New Zealand Native Orchid Journal 174 August 2024 The Sinclair specimen of *Caladenia*, a response to "alpine and subantarctic *Corybas*", regional threat classifications for Otago orchids, *Thelymitra venosa* var. *cedricsmithii*, upcoming events.



Botanical Art Worldwide 2025

Our Plants - Past, Present and Future
O Tātou Tipu o Mua - o Ināiane me te Āpōpō

'Linking People to Plants through Botanical Art'

Botanical Drawing: Emma Scheltema

EXHIBITION DATES & VENUES

AUCKLAND BOTANIC GARDENS

29th March - 29th June 2025

WELLINGTON BOTANIC GARDENS

1st August - 30th September 2025

ASHBURTON ART GALLERY

18th October - 7th December 2025



more information here:

<https://www.botanicalartnz.org/baww25-new-zealand>

