

Ross G. Robbins (1919–97), botanist in New Zealand and New Guinea

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The first part of this article chronicles the life and career of New Zealand plant-ecologist Ross Robbins. A bibliography of 28 items follows, then a summary of his collections (c. 4500 in all), and lastly, a note of the taxa named after him (15 species, mainly mosses from Papua New Guinea).

Ross was born in Whanganui, the third of four children (Note 1). He probably attended Whanganui Technical College and is likely to have been exposed there to at least one formative influence, when “Dr Fred J. Williams of Papua”, a tireless promoter of the Esperanto language, visited that part of the country (King 1973, especially pp. 78–79; Note 2). A fair amount of confidence accompanied this unusual interest—the youthful Ross not only attended the 1938 Esperanto Congress in Wellington but entertained it with a magic show. He would keep an interest in Esperanto and stage magic for the larger part of his life (e.g., *Canberra Times* 22 Oct 1966 p. 14).

In the first year or so of World War II Ross was a horticultural trainee with the well-known New Plymouth firm of Duncan & Davies. He then joined the Ordnance Corps of the 2nd NZ Expeditionary Force and left for Suez in December 1942. He seems to have spent his war service entirely in the Middle East. Letters from him to the Davies family are held by the New Plymouth Public Library. An early one, from “Sgt R.G. Robbins”, has been reproduced by Jellyman (2011: 74)—in Ross’s well-formed writing, a single page expresses appreciation of the gift of a Christmas cake (“Kolos!, Arabic for finished”) but has no botanical detail. The other letters are not so very different and indicate a war spent largely in Cairo and Alexandria, a tedious, hot, dusty time no doubt but relieved by visits to an excellent Agricultural Museum and the possibility of acquiring new sleight-of-hand tricks from the cities’ amazing ‘guli guli’ men (cf. Aitken 1963: 51).

For a short while after the war Ross again worked for Duncan & Davies (Jellyman 2011). In December 1945 he was in Stewart Island. The idea of becoming a serious collector of plants seems not to have made itself felt yet, to judge by his getting there just a single (unnumbered) *Usnea* lichen.

In 1946 he moved north to the classic Auckland student address of 7 City Road, a two-minute

downhill run to the day’s first lecture. Coincident with his arrival at the university was that of a similarly eager man, Valentine J. Chapman (1910–80), head of the new Botany Department. Later students would remember Val mainly as an administrator but he had done fieldwork in Jamaica and Sri Lanka, and his colleague, John Morton, has noted that Val brought with him from Cambridge a keenness for making ecological studies in all sorts of habitats (Morton 2000; see also Sinclair 1983: 210).

Ross became part of Chapman’s group and had several similar-minded friends, including Carrick Chambers, Rex Mirams, George Mason and Colwyn Trevarthen. Just a little of their work and play in Auckland’s mangroves, lakes and kauri forests is recorded in a history of the University Field Club (Bollard 1972), in the early volumes of its journal *Tane*, and also in terse entries (“moss”, “magician”) in the Hut Book of the University’s property at Swanson (presently in the care of the Auckland War Memorial Museum herbarium).

He had by this time developed an interest in mosses. He was collecting them as early as 1946 and in the next several years helped his fellow students with identifications. A first record for the country came when he found the adventive moss *Barbula convoluta* at Cheltenham Beach in 1948. In a history of New Zealand’s National Forest Survey 1946–55 Ross “Mossy” Robbins is noted as having participated “as a student” in the West Taupo region, apparently in 1946 (Millen 1999: 35; see also the unpublished memoir of Robert G. Lawn, which, according to Millen, includes material from Robbins.)

In 1949 Ross had enrolled for his master’s degree and was studying the ecology of the bryophytes on the coastal dunes at Woodhill north of Auckland. It was mainly a sample-based investigation but included a simple experiment on tolerance to desiccation. The flora, of 12 liverworts and 45 mosses, was identified with help from K.W. Allison and G.O.K. Sainsbury. His collections, all from the first two months of 1949, are now split between AK and WELT (and make a rather incomplete voucher set).

Ross submitted his thesis in 1949 and the next year was awarded his degree, though with second-



Fig. 1. Ross Robbins in New Guinea, probably 1957. Original caption "'Trader Horn and the pygmies'. Native hut and boys at Tomba, 8000 feet. Mixed lower montane forest on the Nebelyer Divide in the background". By kind permission of Mr Kim Pullen, Canberra.

class honours; considering the amount of fieldwork in his thesis, I suspect that this might have been because he had rather neglected exams. He wrote this research up and had it published in an overseas journal in 1952.

By this time, probably through Val Chapman's influence, Ross had obtained a lectureship at the new University of the West Indies in Jamaica. He taught there in 1951–52 and carried out enough fieldwork to be able to write, together with colleague G.F. Asprey, a substantial account of the island's vegetation. This appeared in *Ecological Monographs* in 1953 and includes several of the new-fangled forest profile diagrams (cf. Richards et al. 1940) and a list of mosses identified by E.B. Bartram.

For some reason, perhaps of the heart—he was to marry in 1953 (see Note 3)—Ross returned to New Zealand in November 1952. Then, from 1953 to 1956, he lectured in botany at Wellington's Victoria University College while also enrolled

for a Ph.D. at Auckland. He made few collections at this time but was active in the Esperanto community and was a New Zealand Royal Society Associate Editor in 1955–56.

Ross was awarded his Ph.D. in 1958. His research here yielded two articles, both of which were published with New Zealand's Royal Society. The one of broader scope would appear four years later. The lesser one was published immediately. It is a well-observed piece of landscape history, showing, for example, that mahoe rather than kanuka is the main colonizer of recent scree deposits in the Orongorongo Valley. Forest profile diagrams again featured.

Ross's abilities, and perhaps the occasional diversionary piece of stage magic, ought to have made his time lecturing at Wellington a happy one. Whether or not this was so, he left the country in March 1957 for a more adventurous posting, that of Plant Ecologist with Canberra's

CSIRO Land Research Division. After a short amount of training, he (the only New Zealander) and his new mates went off to Papua New Guinea (Fig. 1) to take an early part in CSIRO's ambitious land resource survey program (Keig et al. 2019).

Between 1957 and 1960 Ross worked on four of these surveys (the fourth being published only in 1976). His job was mainly one of description, but he also made collections, of mosses especially, and so brought to science a good number of new species. Fellow botanist Dick Schodde remembers him (pers. comm. 3 Aug 2021) as being generous with his time, easy-going, somewhat idiosyncratic but well regarded by his fellow ecologists (Note 4).

Ross then left CSIRO. Perhaps three years of fieldwork was enough for someone in his late 30s, but it has been hinted that professional disagreement over the origin of PNG's grasslands might have been a contributing factor (Allen 2005: 595). For five years, beginning 1 June 1961, he became a Research Fellow in Biogeography in the School of Pacific Studies at Canberra's Australian

National University. He collected and published rather little at this time but did make short visits to montane parts of Fiji and New Caledonia in 1962, Malaya and Thailand in 1963, and the Philippines in 1965 (see Robbins 1968; Fig. 2). He also went back to PNG to collect at least once more, in August 1964, when he helped Auckland University ethnobiologist Ralph Bulmer for a "very hard-working week" in the Kaironk Valley (Majnep & Bulmer 1977: 15; see *Bulmer* specimens in LAE).

The early 1960s also saw the appearance of the big idea in Ross's Ph.D. work, that the kauri and podocarps in New Zealand forests were undergoing a long-term replacement by *Beilschmiedia*, *Nothofagus* and *Weinmannia*. Although this "Gymnos versus Dicots" theme was still being taught at Auckland in the early '70s it had not been looked upon kindly by other forest ecologists and is now largely ignored (e.g., Wardle 1991: 603, but see Biffin et al. 2011). Also, it was during this decade that objections arose to Ross's claim that profile diagrams could detect layering in forest canopies, and in particular, that montane tropical forest is 2-layered and lowland forest 3-layered. What should have been a time of

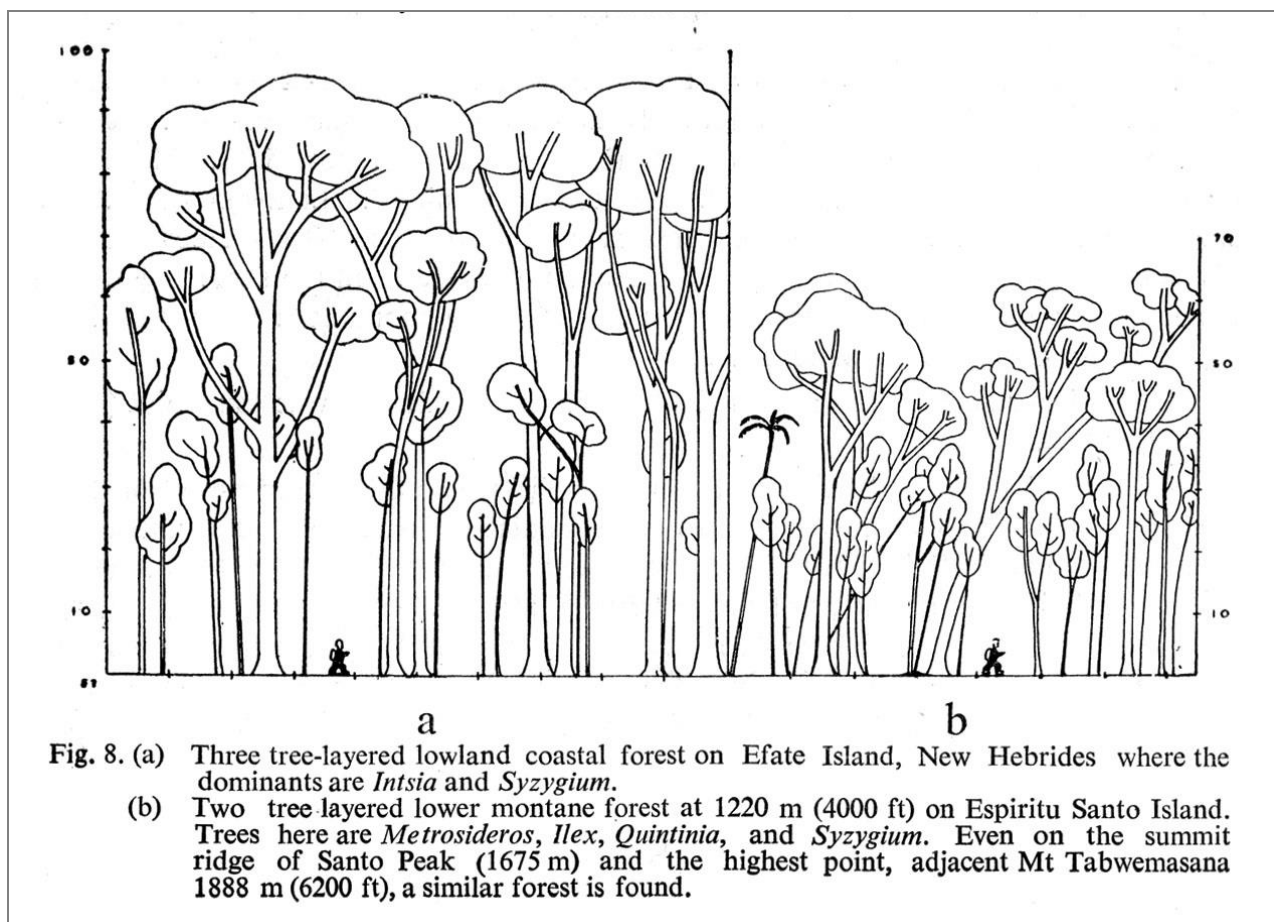


Fig. 2. Two forest profile diagrams from Vanuatu and their original captions (Robbins, 1968: 532 figs. 8a, b).

intellectual consolidation for him seems instead to have been a falling-off (Walker 1966; Paijmans 1976: 73; M. Coode, pers. comm. 28 Jul 2021; Note 5).

At the end of 1966 Ross took an appointment as first Curator of the Canberra Botanic Gardens. A newspaper interview concerning his plans here (*Canberra Times*, 27 May 1967 p. 9) shows him in rather apprehensive profile...at any rate, in less than a year he had resigned in favour of a more independent position, as sole botany lecturer in the Department of Biology at Port Moresby's new University of Papua New Guinea.

In 1968 he and botany tutor Mary Pulsford started the UPNG herbarium (Frodin 2007; Pulsford c. 2017). Sadly, much of this effort was wasted, when most of the early collections were destroyed ten years later in a disastrous and disgraceful herbarium fire (Frodin 2007). There are numerous *Pulsford* duplicates elsewhere, e.g., in BRI and LAE, though none from 1968; no *Robbins* collections from this time are known.

Almost nothing else can be said of Ross' time at UPNG. I suspect that for him the magic had faded, if for no other reason than the contrast between an increasingly crowded town and his memories of the forests and mountains of his survey days.

Ross quit his UPNG position in 1969 or 1970 and returned to Canberra (Note 6). He did not re-establish himself there, nor did he continue collecting. It appears that in the mid-1970s, apparently after a divorce, he left Australia for a position in the Department of Applied Plant Sciences at Kenya's University of Nairobi—given the political situation, this could hardly have been a wise decision. It is thought that he then returned to Australia and (according to Lyn Craven (pers. comm. to R. Hide c. 2014) may have taken up an irrigation block near Mildura. He is known to have moved to Brisbane towards the end of his life; he also married again. He died on 1 July 1997 in Redland Bay, Queensland.

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Collections

In summary: Ross Robbins made about four and a half thousand plant collections, mainly mosses and higher plants from montane Papua New Guinea.

New Zealand collections

There are *Robbins* specimens at AK (Auckland War Memorial Museum), CHR (Allan Herbarium, Landcare Research NZ), PDD (New Zealand Fungarium, Landcare Research NZ) and WELT (Museum of New Zealand Te Papa Tongarewa). All are from New Zealand, except for AK’s 31 higher-plants from Jamaica (coll. Jan 1951–Dec 1952) and a moss from Papua New Guinea; also, in CHR, there is a flowering plant from Fiji (207489, coll. Feb. 1962). Listed by herbarium, these collections are:

AK 114 mosses, 8 liverworts, 28 lichens, and 1 alga, mostly from Woodhill, the Waitakere Ranges and the Auckland region, a few from the central North Island and other places. The earliest is that of an *Usnea* (AK 311140, Stewart Island, coll. Nov 1945). Only the bryophytes belong (in part) to a consecutive numbering system, with *Robbins* 1 representing the liverwort *Chiloscyphus teres*. The highest number here for the mosses is *Robbins* 262, but there are many gaps— perhaps some of this missing material was sent out to specialists.

CHR 23 higher plants and ferns, from various North Island localities. Also, one moss, collected from Mt Holdsworth in company with R. Lloyd and identified by K.W. Allison in 1948. Note that CHR 570788 “*R. Robbins* 40a”, an isotype of the Australian endemic moss *Bryobartramia robbinsii*, was collected not by Ross but by the well-known amateur Fred Robbins of Castlemaine, after whom this moss was named.

PDD 8 fungi, made in his time as a student, mostly from Woodhill. There is also some problematic PDD material. Firstly, an older collection (PDD4201) made by “R Robbins” from the Appleby Research Orchard in Feb 1942. Secondly, two collections (PDD 4301, 4302) also databased just “R Robbins” said to have been collected in Riwaka, Nelson, in March 1944— this date seems likely to be wrong, being perhaps an error for 1942. Thirdly, there is one collection (PDD 11403) said to have been made by “R E Robbins” in Havelock North in 1952.

WELT 238 mosses, mostly from the Auckland region, including Woodhill. They are unnumbered; the latest is dated July 1950. One set of mosses, collected Oct–Dec 1946, comes from the central North Island. There are also a few higher plants, including a Lake Waikaremoana collection made in

Nov 1949, six from Cook Strait in Dec 1953, and a single Westland collection of 1956.

Overseas collections

Details about these can be found in van Steenis-Krusemann (1974) and Vegter (1983). The specimens are located mainly at CANB, LAE and L. The highest collecting number occurs on the moss *Ectropothecium robbinsii* (L3960603 Robbins 3927) from the Kaironk Valley in the Schrader Range, Papua New Guinea, collected 24 Aug 1964.

Collections in the first two of the above herbaria can be accessed via several online databases: Australasian Virtual Herbarium, Consortium of Pacific Herbaria, and PNG Plants. Most of their c.2300 *Robbins* records come from Papua New Guinea, and about 40% of them are mosses. His PNG collecting records here start on 23 Jun 1957 (*Robbins* 1, CANB plus 3 dups.) and finish in 1960.

A "modest but selective" (Crum 1959: 188) collection of mosses from Mt Gedeh in West Java, made in Dec 1958, are at CANB and CANM (bryophyte collection of the Canadian Museum of Nature).

For 1960, Bartram (1961b: 185) wrote that Ross Robbins had made "extensive moss collections mostly from unexplored areas in the Western Highlands"; duplicates should be at Bartram's home herbarium (FH, the Farlow Herbarium at Harvard University).

In the CANB database Ross Robbins is seen to have made 63 moss collections from Australia during the years 1959–61.

Other plant material collected by Ross Robbins is said to come from Malaya in 1963 (6 in L, no numbers) and the Philippines in 1965 (the L material of 148 sheets has no collecting numbers). There is material in L (mosses only?) collected in 1964 from New Guinea's Schrader Range, (including *Ectropothecium robbinsii* as cited above).

The above herbarium databases show a small number of *Robbins* collections from Fiji (March/April 1962) and New Caledonia (July/Aug 1963). In 1963 Ross and his friend Carrick Chambers went to Vanuatu, where he studied forest structure (Robbins 1968: 532) but he apparently collected just one specimen (CANB 283268 *Robbins* s.n., Espiritu Santo, coll. Aug 1963).

Eponymy

Fifteen species have been named for Ross Robbins. All are from Papua New Guinea and have the epithet *robbinsii*.

—11 mosses: *Eucamptodon* (Bartram 1959); *Barbula*, *Chaetomitrium*, *Ectropothecium*, *Syrrhopodon*, *Thuidium* and *Trichostelum* (Bartram 1961a); *Campylopus*, *Endotrichella*, *Leskeodon* and *Macrothamniella* (Bartram 1961b).

—1 liverwort, *Riccardia robbinsii* Hewson & Grolle in: R. Grolle, *J. Hattori Bot. Lab.* 22 (1966) 72.

—3 woody flowering plants, in *Dimorphanthera*, *Melicope* and *Syzygium*; appropriately, all grow in the lower-montane forest zone.

Notes

1. Gordon Ross Robbins (as on his birth certificate, but always known as Ross) was born 3 August 1919 in W(h)anganui, son of Donald R. Robbins, accountant of Gonville, and Rhoda Antoinette Gower, née Pinches. He had two brothers, Colin Wildord (1914–2002) and Donald Campbell (1922–1992), and a sister Beth (1918–1993).

2. Fred. J. Williams (fl. 1930s) was a medical doctor in Papua, at Samurai Island in Milne Bay. His wife seems to have been a New Zealander. Ross Robbins was vice-president (1953) of the New Zealand Esperanto Association in 1953 and president in 1962–63 of the Australian Esperanto Association.

F. J. Williams is mentioned several times in King (1973). This unindexed but otherwise very thorough work was compiled, its author hints, on the grounds that one day everything will be interesting. In this spirit I note that it mentions Ross Robbins on the following pages: 109 "a series of illusions by Mr Ross Robbins of Wanganui" [end of 1938, the Ninth Congress of the NZ Esperanto Association]; 126 "serving overseas" [Nov. '42]; 134 "Among the well-known arrivals [mainly war returnees] to be announced through the columns of *New Zealand Esperantist* in 1945 were...Ross Robbins"; 149 [talk by R.R.] "Experiences with Esperanto in several lands"; 181 "recently returned to Wanganui from Jamaica"; 182, 187, 191, 200, 207, 215 "on Mar 5 [1957] Mr and Mrs Ross Robbins and family left Auckland for Australia, where Mr Robbins took up a position at the University of Canberra [sic]"; 322, 333, 326.

3. In 1953 Ross married G.E. Currie (1925–2014), a Scottish woman who had emigrated to New Zealand after the war. In 1952, according to the Otago University Calendar of that year, "Gloria Elizabeth Currie B.Sc. (St Andrews)" was Assistant Lecturer (Bio-statistics) in the Department of Hygiene and Preventive Medicine. In Canberra, having become computer-literate, she taught their use to business-people and distance-learning students. She was awarded the Order of

Australia in 2004. (See the two articles in the November 1996 issue of the newsletter "Sixteen Bits" [Journal of the PC Users Group (ACT) Inc.], one headed "Have computer, will travel" by Gloria Robbins, the other "About Gloria Robbins" by Jim Hume; www.pcug.org.au/16bits/96_11/pg20.htm, accessed 20 August 2021).

Their marriage produced two children, Bruce Harvey Robbins (1955-2012) and Briar Elizabeth Robbins (1958-2018).

4. More about Robbins in the field in PNG and his relationships with his co-workers might be found in the letters that fellow botanist Roy Pullen wrote home—he and Ross were on three surveys together. I have not seen this material ((see References below, under Pullen).

5. Although van Steenis (1972: 34) does not cite Robbins' ideas on montane forest structure he does describe the "elfin" forest of the mountains of Java above 2000 m as being two-layered and without emergents.

6. The *Flora Malesiana* Collectors entry for Robbins (van Steenis-Kruseman 1974: 80–81) says about the later part of his career: "1961–66 Research Fellow in Biogeography, Australian National University; for seven months acting as the first curator of the Canberra Botanic Gardens; in 1966 appointed Professor in Botany in the new university at Port Moresby, Papua, taking up the post in July 1967; in Aug. 1970 he accepted an appointment teaching biogeography at Canberra University".

With respect to the last statement, presumably Australian National University is intended, since there was no "Canberra University" at the time. I have not been able to check ANU's 1971 Calendar, but Ross Robbins does not appear in its 1972 Calendar nor subsequently.

Also, the photograph in the *Flora Malesiana* entry, of Ross holding a bunch of foliage, is said to be from "New Guinea, 1961"; however, no New Guinea Robbins collections are known from this year.

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