

# AUSTRALASIAN BRYOLOGICAL NEWSLETTER

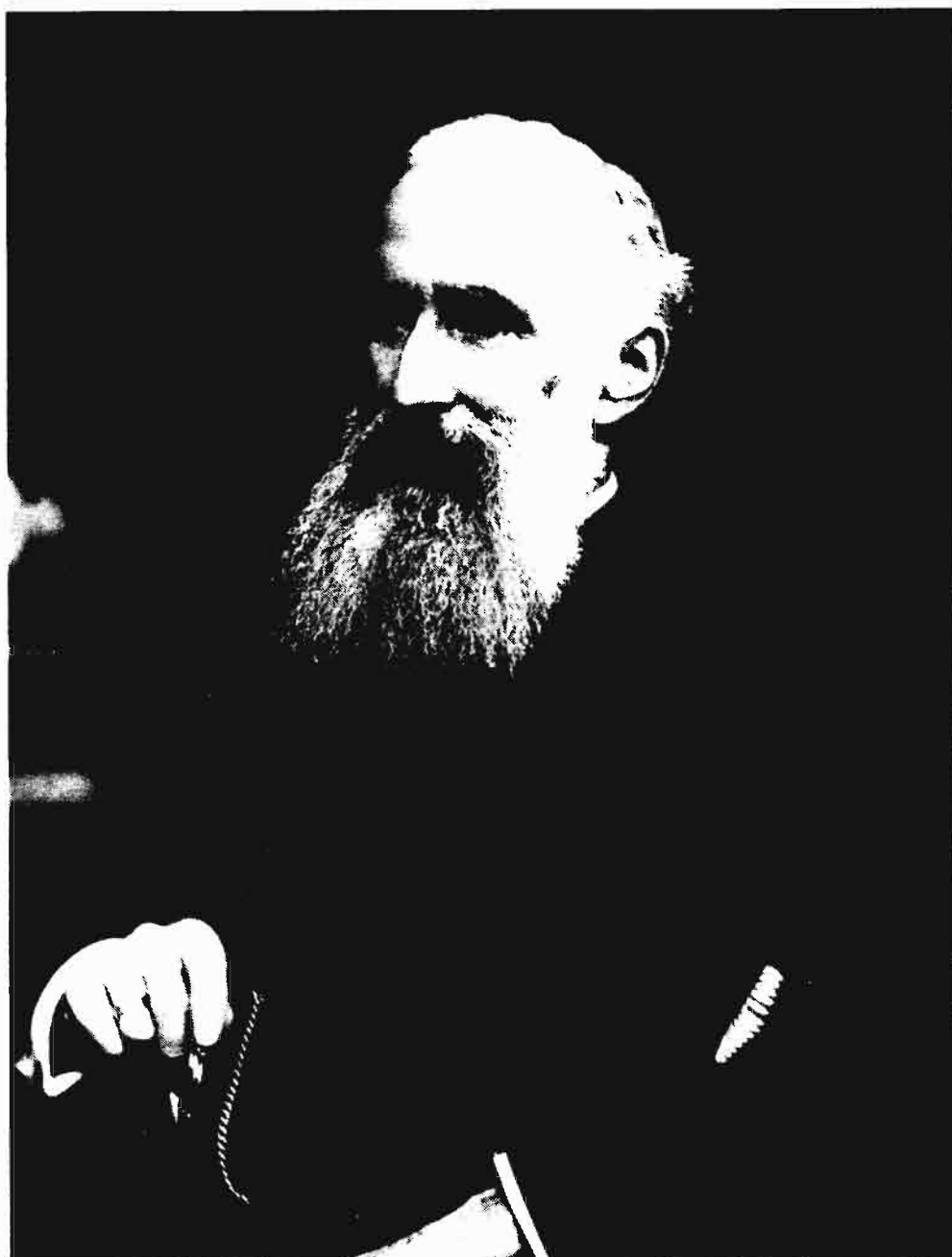
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*T.W.N. Beckett*  
1839-1906

### COVER PAGE

**Thomas W.N. Beckett** (1839-1906) is a dominant personality in the development of bryology in New Zealand during the late 19th and early 20th century and his work provides a cornerstone for the investigation of mosses in Australasia. Beckett's herbarium, currently at CHR, is arguably the most valuable bryophyte herbarium in New Zealand, and is accompanied by Beckett's extensive correspondence.

Beckett was born and educated in Liverpool. As a young man he emigrated to Ceylon where he became established as a coffee grower, and where he seems to have acquired his interest in bryophytes. Between 1869 and about 1879 the Ceylonese coffee industry was devastated by a native rust, *Hemileia vastatrix*. the destruction of the Ceylonese coffee plantations led to extensive planting of tea plantations (which then became the preferred drink of the British Empire), financial ruin of many of the planters, and caused Beckett, with his wife and four children, to emigrate to Canterbury in 1883. Beckett purchased a ten acre block (which was named "Elbedde") on the then western outskirts of Christchurch and established himself as an orchardist. Beckett was fortunate in being able to devote considerable time and money to his interest in bryology. He travelled and collected extensively throughout the South Island, acquired a substantial bryological library, and gradually developed a beautifully curated bryological herbarium, while relying heavily on overseas authorities to name his critical material. Beckett's main botanical interest was the mosses; hepatics and lichens occupy a minor portion of his herbarium. His herbarium forms a vitally important part of CHR, and continues to contribute to our knowledge of the New Zealand flora. Beckett's moss collections are superb: ample, well-documented, usually fruiting, and always meticulously mounted.

While Beckett's collecting activities were mainly on the South Island of N.Z., especially Canterbury and the West Coast, his bryological interests were wide-ranging. He corresponded, and exchanged specimens, with many authorities and collectors elsewhere. Among New Zealand botanists W. Bell, R. Brown, T.F. Cheeseman, F.A.D. Cox, J. Hector, T. Kirk, J.H. McMahon, D. Petrie, O.J. Rutland, and T.G. Wright were correspondents, while Australian correspondents included Bailey, Bastow, F. Mueller, Reader, Sullivan, Watts, Weymouth, and Whitterton. Geographically more distant workers with whom he exchanged material, including a large number of type specimens and exsiccatae, include Beschereille, Best, Braithwaite, Britton, Brotherus, Bryhn, Cardot, Demetrio, Dusen, Duthie, Fleischer, Goebel, Gollan, Grout, Howe, Husnot, Holzinger, Jaederholm, Kern, Langlois, Levier, Mackay, Macoun, C. Mueller, Nadeaud, Paris, Theriot, Ule, Waghorne, and Warnstorf.

In the Beckett herbarium duplicates of Per Dusen's collection from southern Chile are of special interest to bryologists concerned with southern temperate floras and there are many isotypes of Brotherus names from all regions. A large number of C. Mueller types (especially Australasian and South American) are also present and are of particular importance because of the WWII destruction of the Mueller herbarium in Berlin; it is likely that in the case of New Zealand (Australian?) Muellerian species that the material in herb. Beckett may be the most appropriate choice for designation as lectotype. The herbarium also contains much Ceylonese material including specimens collected by Thwaites.

Beckett was actively collecting and studying mosses during the same period as two other Christchurch residents: Robert Brown (R. Br. bis) and T.G. Wright. Brown had resided in Christchurch since 1876, and he had begun collecting some Canterbury mosses by late 1878. Beckett's relationship with Robert Brown, was not a happy one, at least after a "falling out" between them occurred in 1892; some understanding of their relationship is needed to put Beckett's bryological contributions in perspective.

Their initial misunderstanding seems to have involved a pottiaceous moss that Beckett had sent to C. Mueller. Mueller coined the name (in litt., 25 May 1892) *Beckettia bruchioides* for the plant in question, but delayed publishing this name for some six years. Brown, informed by Beckett of Mueller's intention, and with at least some knowledge of the plant, preempted the acceptance of Beckett's namesake genus by reading a paper to the Philosophical Institute of Canterbury on 7 September 1892 (Trans. N.Z. Inst. 25: 285-287, 1893) describing the genus *Hennedia* and three included species. Brown's actions precipitated a rift with Beckett that never healed. Both generic names are now considered synonyms of *Hennediella* Par.

In a letter to Beckett dated 19 December 1892, T.G. Wright refers to the misunderstanding: I heard of what you had been doing in the moss line of business, and also of the unpleasantness with "Brownii"...you may believe that I felt very sorry to learn that Brown's naturally irritable temper had overcome him. Although I have reckoned Brown as an intimate acquaintance for many years I know he can be when he pleases 'damme'<sup>1</sup> disagreeable, although personally I have nothing to complain of. The principal evil arising from it, apart from its annoying you, is that of the same plant being twice described and under different names.

It is not possible at this distance to unravel the relationship between Beckett and Brown. Some South Island plants were studied by both Beckett and Brown; a handsome aquatic *Schistidium* from the Kelly Range of Westland is an example. The *Schistidium* was first collected by Brown "growing on stones under water in small tarn, summit Kellys Range" in November 1889. Brown subsequently described and illustrated this plant (Trans. N.Z. Inst. 27: 409, 1895) naming it *Grimmia aquatica*, but this name is an illegitimate homonym, having been earlier applied to a European species. However, a portion of Brown's original specimen was in Beckett's herbarium, and Beckett had sent some to C. Mueller, who eventually described it under the name *Grimmia subflexifolia* (Hedwigia 37: 164, 1898), which appears to be the earliest legitimate name for a distinctive N.Z. plant. Similar examples, most not involving Brown's own collections, occur in other genera.

In the preface to his first botanical paper (Trans. N.Z. Inst. 25: 276-285, 1893) Brown notes that he was writing on his subject (in this instance *Andreaea*): "prematurely, much remaining yet to do, but from circumstances which have recently transpired I am forced to do so in order to protect my own rights; for acting on the suggestion of the late Sir Julius von Haast, I presented nearly all my specimens and camera lucida drawings to the Christchurch Museum, where they remain for any one to describe who may think fit to rob me of my hard-earned rights." The "any one" to whom Brown alluded was T.W.N. Beckett. Brown seems to have felt Beckett was a bryological upstart and to have resented having to share the New Zealand bryological field with him. In using Beckett's herbarium for many years, and frequently referring to his correspondence, I have acquired a feeling for Beckett as a gentle and generous man. I am unable to judge whether Beckett treated Brown unfairly. Probably the animosity that existed between the two was exacerbated by differences in their economic and social positions. Beckett was an educated, relatively wealthy, and established member of Christchurch society (he was a Warden at St. Barnabas Anglican Church in Fendalton, a then- and still- fashionable precinct in Christchurch). Brown, a cobbler by trade, had neither Beckett's material wealth nor the associated social status. Over time, Beckett's superbly curated herbarium, associated library, and voluminous correspondence, have remained intact and in excellent condition. Type specimens collected by him can be readily identified and consulted. In contrast, Brown's poorly curated herbarium was dispersed (with a major fraction having been sent by his son to H.N. Dixon), his library resources at best meagre, and his correspondence is unknown to me. His type specimens are

<sup>1</sup> word used by HMS Pinafore's captain and the cause of Wright's circumlocution

scattered (some in BM, some in CHR, many apparently lost) and poorly curated and documented. To give him his due, however, an appreciation of Brown, by L. Cockayne, is in the first edition of the "Natural History of Canterbury" (Speight *et al.*, 1927). The two men were both extraordinary, yet two more contrasting contemporaries can scarcely be imagined, and their failure to get along is not surprising.

In 1892 Beckett commenced a short-lived correspondence with Carl Mueller of Halle, Germany and in March he sent Mueller a packet of 72 New Zealand mosses. Mueller replied promptly (25 May 1892) with his opinion of the mosses, indicating that he would be happy if Beckett published the descriptions of the many resultant novelties in a New Zealand journal. On Mueller's advice, Beckett soon published 14 new species (excluding *Beckettia bruchioides*!) in two papers (Trans. N.Z. Inst. 25: 289-297, 1893; *ibid.* 26: 274-277, 1894). Unfortunately, Mueller seemed to take no notice that the names he coined had been published by Beckett, and he republished most or all of these names himself a few years later (cf. *Phascum austro-crispum*).

Beckett's collections are cited, many as types, in the three parts of Mueller's *Symbolae ad Bryologiam Australiae* (Part I: Hedwigia 36: 331-365, 1897; Part II: *ibid.* 37: 76-171, 1898; Part III: *ibid.* 41: 119-134, 1902). Of 88 New Zealand species described (or redescribed) in this publication, the bulk are based either on Beckett's collections or upon material sent by other New Zealand botanists to Beckett, and sent by him to Mueller in 1892. I believe that little of the confusion surrounding the names associated with Beckett's collections can be attributed to Beckett himself. Beckett was not always confident of Mueller's taxonomic judgements and after February 1893 ceased corresponding with him, for reasons unclear to me.

In July 1895 Beckett began a long-lasting and fruitful correspondence with V.F. Brotherus, arguably the most influential muscologist of the period. Brotherus seems to have been unstinting in his taxonomic assistance to Beckett and much material in herb. Beckett is annotated in Brotherus' characteristic hand. Copious amounts of Beckett material were likewise incorporated into herb. Brotherus (now at H) and were cited as types of species described in Brotherus' "Some new species of Australian mosses" (Ifvers. finska Vetensk Soc. Foerh. vols. 33-42, 1891-1900). Beckett's contributions first appear in the fourth (1898) paper in this series and are exemplified by *Ditrichum blindioides*, *Cheilothea novae-zeelandiae*, *Tortula tenella*, *Funaria subcuspidata*, *F. subattenuata*, *Bryum kirkii*, and *Camptochaete beckettii*.

Beckett was an early member of the Philosophical Society of Canterbury and was elected in 1865 to the Linnaean Society, London.

Eponymy:

*Beckettia* C. Muell., Hedwigia 37: 77 (1898)

*Bryobeckettia* Fife, J. Hattori Bot. Lab. 58: 191 (1985)

*Orthotrichum beckettii* C. Muell., Hedwigia 37: 139 (1898)

*Camptochaete beckettii* Broth., Ifvers. finska Vetensk Soc. Foerh. 40: 114 (1900)

*Orthotrichum beckettii* R. Br. bis, Trans. N.Z. Inst. 35: 333 (1903) (hom. illeg.)

*Lepidozia beckettiana* Steph., Sp. hep. 3: 593 (1909)

Acknowledgements: I thank David Glenny and Susan Noseworthy for commenting on a draft, and the latter for her knowledge of Gilbert & Sullivan operettas. I am grateful to Eric Godley who provided the portrait of Beckett, which reproduces an original held by the Beckett family.

Allan Fife, Landcare Research, Christchurch, New Zealand.

## BRYOPHYTE RECORDS

### *Rhytidiadelphus triquetrus* (Hedwig) Warnst. - in New Zealand

In January 1997 I noticed a vigorous moss unknown to me in my patch of native "bush" just off the wayside from the coach stop in the St. Arnaud village to the headquarters of the Nelson Lakes National Park. After determining it later in association with Jim Crawford, I guessed that it may have arrived off some overseas tourist's boot. I have seen strangers relieve themselves in this "bush" as there are no lavatories at the coach stop and Park headquarters is out of sight! Another possibility for its introduction may have been "through the soft and springy nature (of the moss)....it has been found to be most valuable for packing material for porcelain", and then discarded. I suspect the former reason is more likely as was the case for *R. squarrosus* which was found on a Dunedin golf course in 1975, obviously arriving by foot and also *Fissidens taxifolius* which was first found under a picnic table in Auckland.

This moss turned out to be a new arrival to the Southern Hemisphere and has been confirmed by Dr. Allan Fife in Christchurch.

References to it describe it as a common European moss, up to 20cm tall, with erect stiff branches and radiating stems. The stems are pale brown and the leaves are pale green, widely spreading and of Chaff-like rigidity. It grows from sea level to 2000m altitude in open woodland and natural grasslands, sand dunes, moorland and mountains but not on very acid soils.

We decided at the bryoforum at Westport this year, that as this moss is so aggressive, it is best to eliminate it at the site before it outgrows indigenous mosses in the many situations it favours. It has been dubbed "the triffid" by the gathering.

In the realms of speculation, I wonder if parallel means of dispersal by the feet of birds or insects have been taken by some mosses in the soggy undergrowth of prehistoric New Zealand. It is difficult to imagine spores travelling very far in such thick forest and some mosses might have enjoyed a "free ride" in similar circumstances.

Jean Espie, Nelson, New Zealand.

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### *Marchantia pileata*, an overlooked Australasian species

In Allison and Child (1975), three species of *Marchantia* are described (*M. berteriana* Lehm. & Lindenb., *M. foliacea* Mitt., *M. macropora* Mitt.), but mentioned two others: *M. polymorpha* var. *aquatica* Nees, an introduced but uncommon species, and *M. pallida* Steph. Scott (1985) mentioned *M. pallida* but thought it must be *M. foliacea*. Bischler-Causse (1989) in a publication that was hardly noticed in New Zealand because it appeared in an expensive Kramer edition that was not bought until recently by any New Zealand library (now held by the Landcare library at Lincoln), reinstated *M. pileata* Mitt., a species very similar to, but distinct from *M. foliacea*. She made two synonyms of two New Zealand species: *M. laceriloba* Steph. and *M. setchelli* Pears. and also made synonyms of two Australian species, *M. wattiana* Steph. and *M. pallida* Steph.

Bischler-Causse cited New Zealand localities for 6 specimens, from Raoul Island, "North Island" and from Banks Peninsula, Colenso's type from the eastern Ruahines, another Colenso specimen from Poverty Bay,

the type of *M. laceriloba* from Nihotapu Falls, Auckland, and the type of *M. setchelli* from Waimangu, Rotorua. These localities give the impression of a species of warmer and lower rainfall districts.

I have examined collections of *M. foliacea* in WELT and CHR and found a small proportion of the specimens to be *M. pileata*. These are more widely distributed in New Zealand than Bischler-Causse's cited records indicate, and show the species is not confined to the drier provinces (Fig. 1.).



**Fig. 1. Distribution of *Marchantia pileata* in New Zealand**

The species is very evenly spread throughout the country; by Land District with numbers of known localities in brackets: North Auckland (2), South Auckland (5), Gisborne (3), Hawkes Bay (5), Wellington (7), Marlborough (1), Westland (3), Canterbury (5), Stewart Island (2), Chatham Islands (1). It is not recorded from Nelson or mainland Southland, but surely must be present in those provinces. It is also present on Raoul Island and the Three Kings Islands.

I visited previously collected sites such as the coastal cliffs at Punakaiki, Westland, to see if I could

distinguish the species in the field by its habitat or gross appearance. I found I could not see any difference in gross appearance, and any habitat difference is very small: it seems that *M. pileata* prefers drier habitats such as coastal situations and streamsides through low-rainfall vegetation such as kanuka scrub, although not invariably so. It can be found growing in areas close to streams, and in places kept damp by seepage. Of collections I have made, I found *M. pileata* 4 times on soft siltstone (papa), once on silt, once on limestone, once on sand, and once on a soil A-horizon. I found *M. foliacea* once on soft siltstone, twice on greywacke, once on travertine, twice on silt, and twice on soil (peat or A-horizon).

The differences Bischler-Causse gives between *M. pileata* and *M. foliacea* are summarised in the table below:

**Table 1. Differences between *M. pileata* and *M. foliacea***

	<i>M. pileata</i>	<i>M. foliacea</i>
ventral scale appendage	toothed	entire
shape of inner opening of epidermal pores	convex inner walls	cruciate
degree of lobing of archegoniophore	0.3-0.4	0.2-0.3
dorsal surface of male receptacle	papillate	smooth

I have found it very difficult to count the inner pore cells in both fresh and dried material, but have found the scale appendage character a simple one to use on both fresh and dried material. Unfortunately, the appendage teeth are of a size that makes this character impractical to use in the field. The scales of both species may be tinted yellow or crimson; this is not a reliable way of telling the two species apart, although it seems to me the scales in *M. pileata* are more often yellow.

Postscript: On the Westport bryophyte workshop, some of us found that it is possible to identify *Marchantia pileata* in the field with a 10-16x handlens by bending the thallus to make the scales on the underside stand free of the thallus. The appendage then can be seen against the light and it is just possible to determine whether there are teeth present on the margin.

#### References:

- Allison K.W. and Child J. 1975. The liverworts of New Zealand. Otago University Press.  
 Bischler-Causse H. 1989. *Marchantia* L. The Asiatic and Oceanic taxa. *Bryophytorum bibliotheca* 38.  
 Scott G.A.M. 1985. Southern Australian Liverworts. Australian Flora and Fauna Series number 2. Bureau of Flora and Fauna, Canberra.

David Glenney, Landcare Research, Lincoln, New Zealand.

## NEW BOOK RELEASE

### **A practical guide to Soil Lichens and Bryophytes of Australia's Dry Country**

Can you imagine plants that can expand to more than five times their usual weight when wetted? Or perhaps ones which can survive temperatures as low as  $-100^{\circ}\text{C}$  and as high as  $+80^{\circ}\text{C}$ , and can tolerate high levels of dangerous radiation whilst still holding the soil in place? It may seem amazing, but many of these plants actually grow very closer to us whether we live in the city or the country. In the city they are found in the garden, in cracks on the footpath, and even on fences, rooves and roads. In the country they occupy large areas of the ground, helping to stabilise and fertilise the generally infertile soil. These plants are of course the tiny lichens and bryophytes (mosses and liverworts), and the effect they have on our environment are more far reaching than any of us would ever have imagined.

Lichens, mosses and liverworts are some of the oldest plants on earth, and have been around for millions of years. It is surprising therefore that there isn't more known about them.

Over the past four years, David Eldridge and Merrin Tozer from the Far West Region of the Department of Land and Water Conservation have been delving into the lives of these important organisms. They have put together a comprehensive account about a particular group of these organisms which eke out a living on the soil surface. In their *Practical Guide to Soil Lichens and Bryophytes of Australia's Dry Country*, David and Merrin discuss what makes them special (the organisms that is), how they survive in a harsh environment, how to recognise individual species, and how to manage them.

More than 70% of the area of Australia is considered arid or semi-arid. It is in these areas that these organisms form a rich biological crust with algae, bacteria, fungi and other organisms. Most of these organisms are less than the size of a match head and during dry times are barely visible. The mosses lie twisted and warped on the dry soil, and the lichens lay largely unnoticed.

Within seconds of rainfall these organisms rapidly spring to life. The lichens may appear dull and lifeless but their algal cells are busy producing sugars through photosynthesis. Many lichens even produce nitrogen, which they make available for growing flowering plants. The mosses untwist and increase in size, absorbing water and photosynthesising. The closely related liverworts which have been closed up like a clam during dry times, open up within minutes of rainfall, exposing their green photosynthetic tissue.

Knowing that soil crusts exist and that they are important is the first step to knowing how to manage them. The 'Practical Guide' is aimed at advisory officers working in dry areas, land managers, bushwalkers and anyone with a keen interest in dry environments. It examines the common crust organisms in Australia's dry areas, leading the reader through a step-by-step discussion of their roles in the natural and managed environments and discussing some of the factors influencing their distribution and management. To aid identification, the book includes 50 colour plates of the common organisms in their natural setting, and a key to the more common species.

Soil Lichens and Bryophytes is available from the Information Centre of the Department of Land and Water Conservation, GPO Box 39, Sydney, 2000. Phone (02) 9228 6415 for further details. The price is \$14.95 plus \$2.00 postage.

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## A Tribute from Australia to Prof. W.B. Schofield on his 70th birthday

On July 5th 1997, a party to celebrate the birthday of Prof. Wilf Schofield was held in Vancouver attended by many former colleagues and students. I was able to attend the very joyous occasion. His actual birthday was on July 19th but the date was brought forward as Wilf was off to Alaska for two months on field work. At the party the list of contents of the Journal of the Hattori Botanical Laboratory volume 82 was presented to him in advance of publication. He was delighted and somewhat overwhelmed. This volume, incorporating 30 articles on Canadian and North American bryophytes but contributions on bryophytes from Australia, Japan, China, Western Melanesia and South Africa.

Many Australians have had the pleasure of meeting or spending time in the field with Wilf, where his love of plants, his depth of knowledge and expertise as well as his enthusiasm and teaching ability are clearly seen. My association and work experiences with Wilf began in 1973 when he was on leave in New Zealand working on his famous studies of Disjunctions in Mosses, in particular Bipolar disjunctive mosses of the Southern Hemisphere, with particular reference to New Zealand. He visited George Scott and Ilma Stone in Victoria when they were working on their book 'Mosses of Southern Australia' and came to our first bryological meeting at the University of New South Wales during an ANZAAS Conference. Talks included contributions by Wilf Schofield, George Scott, Patricia Selkirk, Helen Hewson and Helen Ramsay. Wilf and I struck up a friendship that has lasted to this day.

In 1978, as part of a period of Study Leave, I worked in Vancouver on Chromosome Studies of the mosses of Western Canada. Wilf introduced me to Canadian vegetation and taught me about the mosses making sure that I was well supplied with cups of tea. Whilst there, he sent me to visit Dale Vitt in Edmonton, an association that led to a revision of *Macromitrium* and other studies on Orthotrichaceae for the Flora of Australia. At that time two of Wilf's students were Benito Tan and John Spence. I have to thank both of them for the help and contribution they have and are making to the Flora of Australia studies on Sematophyllaceae (also with Wilf Schofield) and the Bryaceae respectively.

In 1983 and 1987 Wilf was able to visit Australia to help carry out field studies for the Sematophyllaceae. Whilst here with his wife Peggy, a marvellous assistant on such occasions, he made extensive collections of bryophytes particularly from North Queensland south to Sydney and had a short time in the field in North Queensland with Ilma Stone. His collections are held at NSW with duplicates in UBC.

In 1983 he spent some time working on Sematophyllaceae at Macquarie University. Several excursions to the Blue Mountains and Jenolan Caves were made. Discussions with Wilf inspired Alison Downing, as a student of Patricia Selkirk, to work on mosses of limestones. This has resulted in a series of publications and a lifetime interest for her.

Wilf Schofield is well known and respected by Australian bryologists for his assistance, advice and help. Those who know him personally find him a field botanist par excellence, a good conversationalist, an avid book collector, a wine buff and a family man. He has offered hospitality to a number of Australian bryologists visiting Vancouver including Heinar Streimann and Rod Seppelt.

The Ramsay and Schofield families have become friends and we value that friendship. Thankyou for all those discussions over cups of tea and congratulations on your achievements, Wilf.

Helen Ramsay, Sydney, Australia.

## **Announcement - Registration of Plant Names**

The International Botanical Congress in Tokyo in 1993 decided that, starting in January 2000, all newly published scientific names of plants would have to be registered. This is a timely and far-reaching innovation that will affect systematic botany as a whole. A test and trial phase (1998-1999) is now being undertaken by the International Association for Plant Taxonomy (IAPT) and the announcement for this test phase is being published for the benefit of the whole botanical community.

### **Introduction:**

Subject to ratification by the XVI International Botanical Congress (St. Louis, 1999) of a rule already included in the International Code of Botanical Nomenclature (Art. 32.1-2 of the Tokyo Code), new names of plants and fungi will have to be registered in order to be validly published after the 1st of January 2000. To demonstrate feasibility of a registration system, the International Association for Plant Taxonomy (IAPT) undertakes a trial of registration, on a non-mandatory basis, for a two-year period starting 1 January 1998. The co-ordinating centre will be the secretariat of IAPT, currently at the Botanic Garden and Botanical Museum Berlin-Dahlem, Germany. Co-ordination with present indexing centres for major groups of plants is being sought, in view of their possible active involvement at the implementation stage. The International Mycological Institute in Egham, U.K., has already accepted to act as associate registration centre for the whole of fungi, including fossil fungi.

### **Registration Procedure:**

The co-ordinating registration centre (IAPT secretariat), and any associated centre operating under its auspices, will register and make available all names of new taxa, all new combinations or rank transfers that are brought to their attention in one of the following ways:

- by being published in an accredited journal or serial;
- by being submitted for registration (normally by the author or one of the authors), either directly or through a national registration office; or (for the non-mandatory trial phase only) as a result of scanning of other published information by the registration centre's own staff.

### **Registration by way of publication in accredited journals or serials:**

For a journal or serial to be accredited, its publishers must commit themselves, by a signed agreement with the IAPT, to point out any nomenclatural novelties in each individual issue of their journal or serial, either by including a separate index of novelties or in another suitable, previously agreed way; submit each individual issue as soon as published and by the most rapid way, to a pre-defined registration office or centre.

Accredited journals and serials will be entitled, and even encouraged, to mention that accreditation on their cover, title page or in their impressum.

A permanently updated list of accredited journals and serials is being placed on the World Wide Web (<http://www.bgbm.fu-berlin.de/iapt/registration/journals.htm>). This list will be published annually in the journal Taxon.

#### Registration by way of submission to registration offices:

Authors of botanical nomenclatural novelties that do not appear in an accredited journal or serial (but for example in a monograph, pamphlet, or non-accredited periodical publication) are strongly encouraged to submit their names for registration and will be required to do so once registration becomes mandatory in the following way: all names to be registered are to be listed on an appropriate registration form, using a separate form for each separate publication; the form (in triplicate) must be submitted together with two copies of the publication itself, either to a national registration office (see below) or, optionally, directly to the appropriate registration centre. Reprints of articles from books or non-accredited periodicals are acceptable, provided their source is stated accurately and in full; one dated copy of each form will be sent back to the submitting author in acknowledgement of effected registration.

Registration forms can be obtained free of charge [a] by sending a request to any registration office or centre, by letter, fax or e-mail, or [b] preferably, by printing and copying the form as available on the World Wide Web (<http://www.bgbm.fu-berlin.de/iapt.registration/regform.htm>).

Registration offices are presently being arranged for in as many different countries as possible. They will serve [a] as mailboxes and forwarding agencies for registration submissions and [b] as national repositories for printed matter in which new names published locally appear.

A permanently updated address list of all functioning national registration offices is being placed on the World Wide Web (<http://www.bgbm.fu-berlin.de/iapt.registration/offices.htm>). This list will also be published annually in the journal *Taxon*.

#### Registration Date:

The date of registration, as here defined, will be the date of receipt of the registration submission at any national registration office or appropriate registration centre. For accredited journals or serials (and, for the duration of the trial phase, for publications scanned at the registration centres), it will be the date of receipt of the publication at the location of the registration centre (or national office, if so agreed).

For the duration of the trial phase, i.e. as long as registration is non-mandatory, the date of a name will, just as before, be the date of effective publication of the printed matter in which it is validated, irrespective of the date of registration. Nevertheless, the registration date will be recorded, for the following reasons:

- to make clear that the name was published on or before that date, in cases when the date of effective publication is not specified in the printed matter;
- to assess the time difference between the (effective or stated) date of the printed matter and that of registration, since it is envisaged that the date of registration be accepted as the date of names published on or after 1 January 2000.

It is therefore in the interest of every author to submit nomenclatural novelties for registration without delay, and by the most rapid means available.

#### Access to registration data:

Information on registered names will be made publicly available as soon as feasible, [a] by placing them on the World Wide Web without delay in a searchable database (<http://www.bgbm.fu-berlin.de/iapt.registration/regdata.htm>), [b] by publishing non-cumulative lists biannually, and [c], hopefully, by issuing cumulative updates on a CD-Rom-type, fully searchable data medium at similar

intervals.

[Liv Borgen, Oslo; Werner Greuter, Berlin; David L. Hawksworth, Egham; John McNeill, Toronto; Dan H. Nicolson, Washington; Officers of the IAPT, c/o Botanischer Garten & Botanisches Museum Berlin-Dahlem, Koenigin-Luise-Str. 6-8, D-14191 Berlin, Germany.]

#### Registration as a positive step:

Registration of nomenclatural novelties seems to me a natural way to go, heading into the 21st Century. It will enable us to find quickly what new names have been published, and to be sure that we have not missed any new name hidden in the paper mountain of botanical literature that comes out each year around the globe. This is particularly important for one-off publications (floras, field guides, etc.), which are notorious for 'hiding' new names.

Some people seem to think that registration implies censorship, but this is wrong. As in the current *Index kewensis* all names will be listed, and without comment as to status, and as soon as received at one of the registration centres. My only caution to those looking at the mechanisms for making registration effective is that they should ensure there is a large network of registration centres or offices spread evenly around the world. This is necessary to make it easy to submit novelties for registration, given the apparently worsening state of mail services in all areas.

[Karen L. Wilson, Royal Botanic Gardens, Mrs Macquaries Road, Sydney, N.S.W. 2000, Australia]

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### **The Vth Australasian Bryophyte Workshop 1998**

This excursion will now be held from 2nd to 7th July 1998, at Hall's Gap, Grampians, Victoria.

Reasonably priced accommodation will be available at a conference centre at Hall's Gap where there is also space for laboratory work and lectures.

Excursions are planned at least to mountain top vegetation, snow permitting (Mount William plateau), basalt lava caves (Byaduk) and rich wet red-gum flats (Victoria Valley and/or Stawell flats).

All enquiries to: George Scott, Botany School, University of Melbourne. Ph. (home): (03) 9419-9237

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### **XVI International Botanical Congress 1999**

The organizers have issued a formal invitation to members of the Australasian Bryological Working Group to participate in the XVI International Botanical Congress in St. Louis on August 1 - 7, 1999.

Any member who wishes to participate or attend can obtain complete current information about the XVI IBC from the World Wide Web at <http://www.ibc99.org> and much the same information is available in the First Circular, which can be received by contacting:

Secretary General, XVI IBC  
c/o Missouri Botanical Garden  
P.O. Box 299  
St. Louis, MO 63166-0299  
USA.

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