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**Editor: Mr. P.J. Dalton, School of Plant Science, University of Tasmania, Private Bag 55, Hobart, Tasmania, Australia. 7001. Ph: (03) 62 267873, Fax: (03) 62 262698. E-mail: P.J.Dalton@utas.edu.au
Website: http://www.utas.edu.au/docs/plant_science/abn/index.htm**

Bryologists at the 22nd John Child Workshop which was situated at Lewis Pass, South Island, New Zealand from 18th to 23rd January, 2007. A full report is provided in the following pages.



Cover Page

St James Walkway, Lewis Pass.

Participants from back left to right are: Allison Knight, Josh Salter, Endymion, Ben Myles, John Steel (partly hidden), Susan Hansard, Lynette Fischer, Neill Simpson, Peter Beveridge, Lyn Cave, Barbara Simpson, John Braggins, Geoff Spearpoint, Darea Sherratt, Rodney Lewington, Anne Redpath, Allan Fife, Maia Mistral, David Glenly, Elizabeth Brown, Owen Spearpoint, Rosemary Lovatt and Paddy Dalton behind the camera.



22nd John Child Bryophyte Workshop Boyle River Outdoor Education Centre, Lewis Pass, New Zealand

The 22nd John Child Bryophyte Workshop was held at the Boyle River Outdoor Education Centre near Lewis Pass, South Island, New Zealand from 18 to 23 January 2007. It is tucked in near Lewis Pass National Reserve and Lake Sumner Forest Park. The surrounding landscape includes mountain peaks, hot springs, lakes, snow tussocks, beech forests, alpine herb fields, grassy river flats, river terraces, gorges, scree slopes, shingle fans and some fault lines. 26 participants including 5 Australians enjoyed great scenery, a nicely placed and well appointed venue, fine company, good bryologising within short distances, not to mention being well fed,

One only had to step outside to find mosses such as *Racomitrium pruinosum*, *Hedwigia sp.*, carpets of the lace lichen (*Cladia retipora*) plus alpine flowers like *Wahlenbergia*.

Our first outing started at Duffy's Creek, a track that lead into the Victoria Range, not that bryologists walked that far. It was just beyond Lewis Pass in the Rahu Saddle area between Springs Junction and Reefton. We could reach the creek from the track and found a rich bryophyte community under red and silver beech. Some notable finds were *Notoligotrichum bellii*, plus *Colura saccata* and *Kymatolejeunea bartlettii* epiphyllic on *Dendroligotrichum dendroides*.

Later in the afternoon we moved on to Lake Stream to visit a small natural pakihis that are surrounded by forest, only 5 minutes from the road. This area is the type locality for *Riccardia multicorpora* and had ponds of *Sphagnum falcatulum* and *Drepanocladus*.



Bryologists in the Bog

Anne Redpath, Owen Spearpoint and Darea Sherratt examine a *Sphagnum* community at the Lake Stream locality. This site also contained the endemic hepatic *Zoopsis macrophylla*.

On Saturday most took the option of going to the Klondyke Spur tracks that started at the Rahu Saddle. The lower track stayed mostly on one level around the valley with a muddy beginning and the upper track climbed steadily.

One carload took the other option of Palmer Road near the Rahu Saddle. The roadside banks were clothed with a bryophyte carpet in hues from almost yellow to reds so dark they appeared black. Here they spent a very happy time until the rain got so heavy as to make returning to base with a load of soggy packages a good choice. Among the abundance were *Distichophyllum kraussei*, *Blindia robustum*, *Oligotrichum tenuirostre*, *Isotachis lyallii*, *I. montana*, *Balantiopsis convexiuscula*, *B. diplophyllum*, *Haplomitrium gibbsiae*, *Megaceros pellucidus*, *Breutelia elongata* and *Solenostoma sp.*

The remaining days were spent at either end of the St James walkway, an east-west traverse that is partially located within the Lewis Pass National Reserve and is generally a 5-day tramp. Sunday saw us at the Boyle River end of the walkway. We only had to walk a short distance up the road beside the Centre to reach the track. This was the drier eastern side comprising forest dominated by red and mountain beech. Mosses and lichens predominated at this site with huge cushions of *Dicranoloma* (very nice on the knees when kneeling!). Orthotrichaceae were abundant with *Frullania* the main liverwort representative. Also found was *Chandonanthus squarrosus* so dry as to be almost unrecognizable. The glaucous *Heteroscyphus knightii* was tucked into a little overhang in a damper part and *Megaceros pellucidus* also turned up there. A diversion from the track onto the road on the return journey turned up a small bog filled with *Drepanocladus aduncus*, *Sphagnum* and luxuriant *Polytrichum commune* that was almost a foot long. Some of the group found time to visit the Nina Valley track through beech forest a short distance down the road towards Lewis pass. A sward of *Lepidogyna hodgsoniae* was found in grass across the swing bridge less than 100 metres from the roadside.

Allan Fife introduces a captive audience to the field characters of mosses. These on site sessions proved very valuable and were supported with named specimens back in the laboratory.



The following day we entered the St James walkway from the Lewis Pass end where there is an alpine nature trail at the carpark along with a viewing platform beside a small tarn with views to the mountains beyond. This was the wetter end of the walkway. The trees and shrubs at the start were festooned with hanging lichens such as *Usnea capillacea* and along with bryophytes we found various sundews (*Drosera sp.*), the odd leaved orchid *Aporostylis bifolia*, and *Omphalina sp.*, a lichen with a basidiomycete partner so the fruiting body looked like a little inside out umbrella a couple of inches high. There were large drifts of *Dendroligotrichum dendroides* and they yielded all 3 liverworts that have been found to be epiphyllic on that moss – in addition to the 2 found on day one *Nephelolejeunea papillosa* was also present. Other finds included *Gackstroemia aff. weindorferi*, *Heteroscyphus cymbaliferus*, and the glaucous *Lepidozia digitata*.

Evenings started with varied pre-dinner nibbles and relaxing beverages that provided socialisation time for those who were prepared to tear themselves away from their microscopes. The dinners filled to the brim any space left in stomachs. Without being told we would never have guessed that it was the first time our cook, Amy, had ever catered for a large group and indeed had not heard of some of the ingredients, nor known what some of the recipes were supposed to look like.

We were treated to a couple of evening talks. The first was John Braggins about the liverwort survey of Rangitoto Island (in the harbour by Auckland), complete with pictures. Elizabeth Brown showed us the preliminary data obtained from DNA work on Lepidoziaceae and warned us that the likely outcome was going to alter the current family tree a fair bit.



A vote of thanks was given to David Glenny (David who!) for organising a successful workshop in a lovely setting, and to the Dunedin contingent for bringing additional microscopes. The group decided not to hold a New Zealand workshop later in 2007, particularly as it would be a big strain on resources to try to organise a workshop here given the large number who are likely to attend the Tasmanian workshop in December 2007. The Dunedin group offer to organise the 23rd John Child Bryophyte Workshop in 2008 in the Catlins area (bottom of South Island) was accepted.

Susan Hansard & Lynette Fischer, Palmerston North, New Zealand.

A Tribute to Elizabeth Mary Madgwick 29 April 1928 - 4 May 2006



Australasian bryologists will have been saddened by the sudden death of Elizabeth Madgwick, one of our long-standing John Child Workshop participants. I first met Elizabeth when Eric and Joyce Watson (he author of 'British Mosses and Liverworts') visited New Zealand in 1986. After their stay in Auckland I was to take the Watsons half way, and hand them over to a botanist friend from way-back, now living in Rotorua. Thus we rendez-voused at Miranda, on the Firth of Thames coast, and I discovered we had another bryologist in New Zealand, namely Elizabeth Madgwick. In that brief encounter I encouraged her to come to John Child Bryophyte Workshops, subsequently made sure she was on the mailing list, and then, when the venue was close to Rotorua at Waiotapu (see group photo), she joined us for the first time. Elizabeth proved not to have forgotten her British bryology, to my continuing admiration, and also quickly added the names of New Zealand bryophytes to that store. Over the years she sent me the occasional moss puzzle. I recall *Chrysoblastella chilensis* had her stumped, which I could perfectly understand, because it had me too, for a very long time. I told her I'd never seen good fruiting material, and back she came a few months later, with a beautiful fruiting specimen. On another occasion I got a letter with specimen enclosed, saying she'd keyed it out in my book as *Isopterygium*, but that couldn't be right – it was 'unlike any *Isopterygium*' she'd ever seen before. The specimen was indeed *Isopterygium limatum*, which Hisa Ando, Japanese pleurocarp specialist, had long ago told me was in the wrong genus, maybe even family. So we both felt good at that outcome!

We have lost a warm and highly competent friend from our circle. Her ability to keep on learning into her late 70s is a fine example, which we will be very lucky to emulate. Her impish smile behind those strong glasses (the latter a hallmark of many a successful bryologist) will long be remembered with affection.

The following has been written by Elizabeth’s husband Madg, to fill us in on her botanical life before coming to New Zealand, and some of her other interests in a busy and productive lifetime. Her Australasian bryological friends extend our sympathy to all her family.

“Elizabeth Mary Madgwick was born in 1928, the eldest daughter of the Reverend H. O. Evans and his wife Gertrude Mary, always known as Molly. On her 10th birthday Elizabeth was sent away to Milton Mount, a school in the south of England for the daughters of Congregational Ministers. The school was not well equipped to prepare young women for university study in science and Elizabeth always credited her entry to Glasgow University to the efforts of her father. At Glasgow she immediately made her mark and completed her B.Sc. in Botany with First Class Honours. Moving to Sheffield University she completed her Ph.D. under the supervision of Prof. A.R. Clapham. Her copy of her thesis, entitled ‘Studies in Bryophyte Ecology’, has long ago been lent and lost, but notes in her files indicate she studied the bryophyte ecology of two woodlands of the SE Pennines, namely Padley and Anston Stones Woods. Completing her thesis early, Elizabeth spent three months based at the University of Lund, Sweden where she met Elsa Nyholm. From 1954 onwards Elizabeth ‘critically and carefully read’ Elsa’s multivolume moss floras.

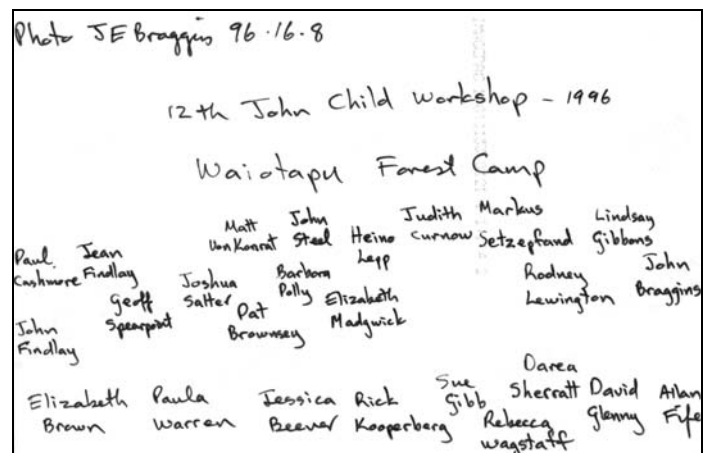
From late in 1953 till 1958 Elizabeth was a Regional Officer for the fledgling Nature Conservancy in parts of Lancashire and Yorkshire in the U.K. She developed a special interest in limestone topography and undertook a study tour to the karst of Yugoslavia. Her involvement with the British Bryological Society saw her attend field meetings, during which time she made a lasting friend of Dr. E.V. Watson whose art works now grace our home.

Following her marriage in 1958 and the imminent arrival of her first child Elizabeth retired from scientific work and began a life of home-maker and world traveller. Her botanical interests remained, as testified by her library of botanical books of North America and New Zealand as well as the many plant lists recorded on field excursions. She was blessed with the sort of memory that made the telephone book unnecessary and Latin names of plants stick like chewing gum to city pavements.

In recent years, faced with the prospect of arthritis and limitations on her tramping and sailing, Elizabeth once more turned to bryology. As she said, a hundred metre walk in the right place can keep a bryologist busy all day. She enjoyed the camaraderie of annual workshops and made many new friends.

On her mother’s side, Elizabeth descended from a long line of ardent Protestants. From them she inherited a love of music – she was an accomplished violinist – and a tradition of doing good works. She was vice-president of the Rotorua Music Federation for many years, a member of the Rotorua Botanical Society, Forest & Bird, active in her church and in the local branch of the Labour Party. Following her death in May 2006 one of the most frequent comments has been on her ability to make new comers feel at home and integrated into the local community.”

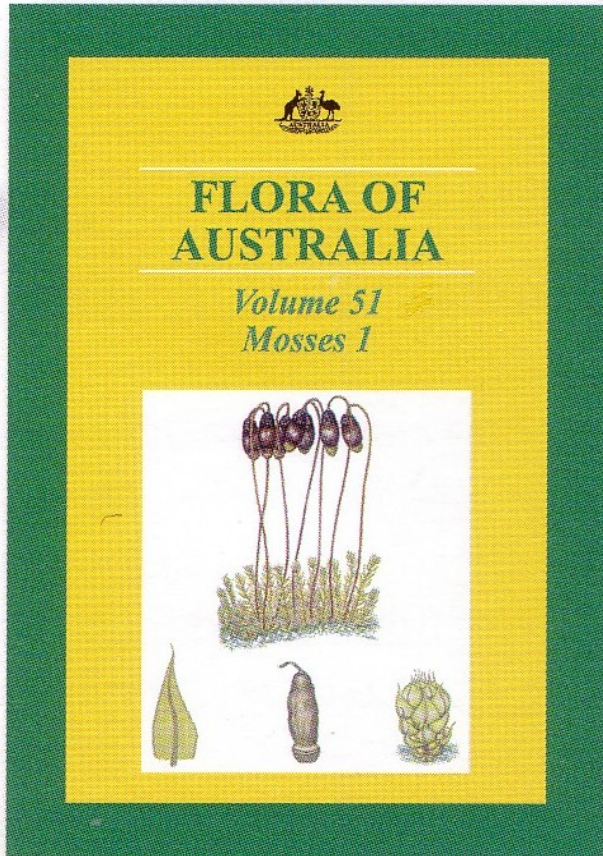
The following group photo with Elizabeth in the centre was taken at the Waitapu Workshop in 1996



Jessica Beaver, Auckland, New Zealand.

Book Review:

Flora of Australia. Volume 51 (Mosses 1).
 McCarthy, P.M. (ed.), (2006)
 450 pp. ABRS and CSIRO Publishing, Canberra and Melbourne.



Contents

- Introduction
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The impressive *Flora of Australia* series has now been supplemented with this, the first of three volumes, covering the moss flora of Australia. As such, it follows the traditions set by earlier volumes in the series in overall quality (though it is to be hoped the number of annoying typos in the introductory chapters do not extend to the monographs).

The list of contributing authors reads like a who's who of Australasian bryology and is naturally reflected in the presented works. Not a smidgen of space is wasted in this book and it only just avoids being a little unwieldy. The chapter on the history of research on Australian mosses by Helen Ramsay is jam-packed with information and suffers not one superfluous word. As with all other chapters, the reference list is extensive. A chapter on the introduction to mosses, a ritual for moss floras it seems, is again thoroughly presented and referenced. I can't help but feel that this chapter is more than adequately covered elsewhere and could have been dispensed with, especially if space and cost were being considered; likewise the short, though comprehensive, chapter by Gregory Jordan on the fossil record of bryophytes.

The key to the genera of Australian mosses is an updated and abbreviated version of that produced in Buck, *et al.* (2002). As such, it would be less useful, lacking as it does, the extended descriptions of the genera and the excellent photographs of diagnostic features as presented in the latter.

Naturally the bulk of the book comprises the treatments, in this volume, of fifty-six genera and follows, as amended, the classification of Goffinet and Buck (2004). However, Mitteniaceae, placed by Buck and Goffinet (2000) and Streimann and Klazenga (2002) in the Rhizogoniales retains that place here although acknowledged in the systematic arrangement of Goffinet and Buck (2004) to be in the Dicranales. Similarly, the Erpodiaceae seems to have lost its place in the Dicranales of Goffinet and Buck (2004), to appear in the Pottiales as in Streimann and Klazenga (2002). Neither of these has a footnote to explain this emendation.

Rather than follow the systematic arrangement of genera in its contents, the book leapfrogs genera and orders to include those treatments that have been completed, presumably, rather than wait for the missing ones yet to be done. I accept that time, money and expertise are serious issues for a major exercise such as this, but for a national flora, the final product will suffer when one has to fish through separate volumes for related genera.

The introductory chapters are preceded by eight pages of colour photographs of twenty-one moss species and towards the end are a further eight pages covering another twenty-four; more tokenism than help.

At the same time as I bought this book, I bought the Scandinavian flora of Hallingbäck, *et al.* (2006) and this, for me at least, has to be the benchmark for future floras. The *Flora of Australia* volume still follows the old paths and has missed an opportunity to move into the modern era using some of the excellent photographic techniques and skills now available, briefly represented here in the work of Lepp, Malcolm and Oldfield. The treatments are well researched and written and the pertinent diagnostic characters drawn to the high standards one expects from these authors. It is a most welcome and valuable addition to the bryologist's library and will, hopefully, be joined in the not too distant future by the remaining volumes.

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- Buck, W.R.; Goffinet, B. (2000) Morphology and classification of mosses. In Shaw, A.J.; Goffinet, B. (eds.). *Bryophyte biology*, pp. 71-123. Cambridge University Press, Cambridge.
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John Steel, Department of Botany, University of Otago, New Zealand



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Bryophyte Records

Have you seen this plant?

Marchantia polymorpha subsp. *ruderalis* Bischl. & Boisselier

M. polymorpha subsp. *ruderalis* has been found about Wellington, NZ, growing as a weed in nurseries and cultivated areas of native plants. Locations include Percy Reserve, Otari-Wilton's Bush and Te Papa. It has since been found in the Boyle River Valley, Canterbury.

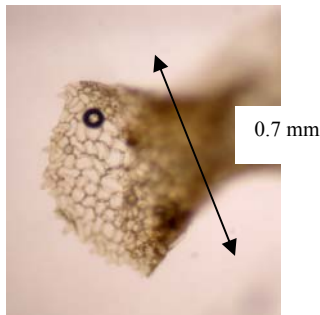
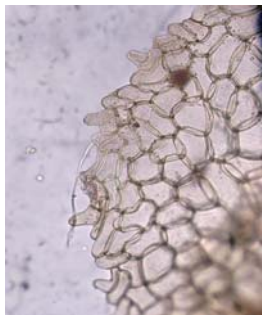
Identity has been confirmed by Dr. David Long, Royal Botanic Gardens, Edinburgh.



Normal sized plants. Widest thallus branch about 12 mm wide



A larger plant from the Boyle River collection. Widest thallus 15 mm.



Appendage to median ventral scale. From the Otari collection

The purpose of this note is to seek information on its distribution within New Zealand. Its most likely location is in nurseries and previously farmed land.

The nomenclature of *M. polymorpha* has ranked the several forms into subspecies, varieties and forms. Here I have followed recent European literature, which recognizes three sub-species. *M. polymorpha* has been previously reported in New Zealand, but without identifying collections to a subset of the species (Brown 1981, Bischler-Cause 1989). At least some of these collections are likely to be subsp. *ruderalis*. It may also be that it has previously been reported as *M. polymorpha* var. *aquatica* (now subsp. *polymorpha*). Paton (1999) provides a description and key to the three subspecies. To summarise this in the New Zealand context:

M. polymorpha L. species can be larger than *M. foliaceae* and *M. berteriana*. When well grown the thallus can be 15mm wide and up to 5cm long although generally smaller. The ventral scales are pale pink to colourless and extend to, or sometimes beyond, the margin to be visible dorsally. The thallus has a succulent brittle texture compared with the stronger leathery texture of *M. berteriana*. The dark median line on some thalli is a good character to look for.

M. subsp. polymorpha (*M. aquatic* (Nees) Burgeff). A continuous black line along the middle of each branch of the thallus on the dorsal surface. The appendage on the median ventral scale has a crenulate or ± entire margin.

M. subsp. ruderalis Bischl. & Boisselier. Well-grown thalli have a discontinuous black line along the middle of each branch of the thallus on the dorsal surface. In the largest of the Otari collection the median band consists of a series of dark dashes up to five across. Smaller thalli have just the occasional dash, or no black markings. The appendage on the median ventral scale has a dentate margin.

M. subsp. montivagans. Bischl. & Boisselier. No median dark line on the thallus. The appendage on the median ventral scale has a dentate margin.

I would be interested to know of any sightings or records of this species in New Zealand or Australia for that matter.

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Elizabeth Brown. *Some studies in the New Zealand Targioniinae and Marchantiinae (Hepaticae)*. A thesis submitted in partial fulfilment of the requirements for the degree of Master of Science at the University of Auckland Feb 1981. 167pp.

Helen Bischler-Cause. *Marchantia L. The Asiatic and Oceanic taxa*. Bryophytorum Bibliotheca, Band 38 1989.

Jean A Paton. *The Liverwort Flora of the British Isles*, Harley Books, 1999. Colchester, England ISBN 0 946589 60 7.

Rodney Lewington, Wellington, New Zealand

Bryological miscellanies from MELU

New to Australia

Bazzania erosa (Reinw. et al.) Trevis.

QLD: Culpha Creek catchment, Cardwell Range; in tree crown in rainforest on gentle slope; coll. 1984, H. Streimann s.n. (CBG 8407147).

Note: This is a common and apparently variable species in South East Asia and Melanesia. It is distinguished from other Australian species by its large, peculiarly boot-shaped leaves, commonly 2.5 mm long and 1.5 mm wide, that have strongly serrate and weakly 3-lobed apices and bulging cell trigones throughout, and by its subcircular underleaves that are as wide as long or slightly broader, with cells similar to those of the leaves, except that around the margin they are thinner-walled and hyaline in a single row (rarely two). Only *B. loricata* has similar underleaves, but that species has much smaller leaves and massive, often confluent trigones.

Lophozia herzogiana E.A.Hodgs. & Grolle

NSW: Tinderry Mountains, in open eucalypt woodland, 1220 m asl; coll. 1993, J.A. Curnow no. 4598 (CBG 9506549).

Note: The identification of this specimen was confirmed by David Glenny (Landcare Research NZ) by comparison with the type. It is the first species of *Lophozia* reported from mainland Australia, although some plants from Victoria have been tentatively assigned to the genus. At the NSW locality it was growing on humic soil. Many thanks are due to Judith Curnow who first drew attention to the specimen and organised its loan to MELU and CHR.

New to Queensland

Podomitrium phyllanthus (Hook.) Mitt.

QLD: Lumholtz National Park, Curran Creek; on rotting burnt log in creek, with *Zoopsis setulosa* and *Distichophyllum mittenii*; coll. Nov 2003 (MELU).

Note: The genus *Podomitrium* is separated from other genera of Pallaviciniaceae by the position of the female organs, which (as in this specimen) are on ventral branches rather than the dorsal side of the thallus. Only four species are known, of which this is the only one reported from Australia.

Metzgeria consanguinea Schiffn.

QLD: Fraser Island, headwaters of Dundoya Creek; on fallen log in piccabeen palm forest; coll. G.A.M. Scott s.n., July 1996 (MELU 2369).

Note: This apparently cosmopolitan species is distinguished by the presence of two types of thalli, one of fairly constant width with a wide apex and the other tapering strongly to a very narrow and acute apex, often with a wing of only one or two cells. So (2002) reported it from NSW, and it was found at the Workshop in Victoria in 2003.

Metzgeria francana (Steph.) Kuwahara

QLD: Bellenden Ker, on trunk of tree-fern; coll. I.G. Stone s.n., Sept 1987 (MELU 583).

Note: So (2002a) considered this to be a synonym of *M. saccata* Mitt., on the basis that Kuwahara (1966) separated the two (in his genus *Austrometzgeria*) solely on the basis of the wide wings of the thallus and the strongly inrolled margins. Her examination of the isotype in FH found no significant differences between them on these characters. But Kuwahara had separated them on the number of cells overlying the midrib on the ventral side (4–6 in *M. saccata*, 2 in *M. francana*). He also noted the presence of dorsal gemmae and hairs in *M. francana* (in *M. saccata*, gemmae lacking and hairs only ventral or marginal) and the difference in the degree of ‘saccateness’ (genuinely saccate in *saccata*, merely lobed in *M. francana*). The specimen cited agrees very well with Kuwahara’s concept of *M. francana*. Further collections might well support So’s view, but until then I think it is prudent to maintain the distinction.

New to Tasmania***Leptodon smithii*** (Hedw.) F. Weber & D. Mohr

TAS: South Sister (near St Marys), mixed with other bryophytes on rock in cavern in montane sclerophyll forest, 790 m asl; coll. Nov 2006 (MELU).

Note: *Leptodon smithii* has been reported from Tasmania in the past, but it seems that no herbarium specimens have existed and it was therefore rightly discounted from the state’s flora by Dalton et al. (1991) and Streimann & Klazenga (2002). This collection shows that the species does occur in Tasmania. It is a largely European species but has disjunct yet seemingly natural occurrences in northern Africa, North America, South America, New Zealand and eastern Australia. In Australia its distribution extends from southern Queensland to Victoria, and now to northern Tasmania. In Tasmania it must be extremely rare and also threatened, as the area immediately around this only known locality was burnt by wildfire in December 2006. In Victoria it is listed as threatened in the state under the *Flora and Fauna Guarantee Act 1988*.

New to Victoria***Metzgeria submarginata*** M.L. So

VIC: Baw Baw Plateau, headwaters of Western Tyers River, with *Radula compacta* on bark of *Leptospermum grandifolium* in mixed riparian forest dominated by *Nothofagus cunninghamii* and *Eucalyptus pauciflora*, 1300 m asl; coll. Feb 2007 (MELU).

Note: This is a tiny epiphyte found also in New Zealand and Tasmania. It is easily recognised by the narrow inrolled thallus, abundant gemmae arising from the inrolled part of the dorsal surface, and very short stubby marginal hairs. It is very well described and illustrated in So (2002b). It is clearly very rare in the state, as it has not turned up among the many Victorian *Metzgeria* collections in MEL and MELU and is not reported from Victoria in collections in CANB.

Polytrichastrum formosum (Hedw.) G.L. Sm.

VIC: Baw Baw Plateau, headwaters of Western Tyers River, on soil over granodiorite boulder in the river, in mixed riparian forest dominated by *Nothofagus cunninghamii* and *Eucalyptus pauciflora*, 1300 m asl; coll. Feb 2007 (MELU).

Note: This species might have been overlooked in Victoria in the past because of its outward resemblance to *Polytrichum commune* and (without capsules) *Polytrichadelphus magellanicus*. The differences are clear when capsules are present or when leaves are examined under the microscope. It has been found also in Tasmania, NSW, New Zealand and Patagonia (Hyvönen & van Zanten 2006).

Telaranea pallescens (Grolle) J.J. Engel & G.L. Sm.

VIC: Baw Baw Plateau, in dense mat with *Zoopsis leitgebiana* in subalpine fen dominated by *Carex gaudichaudiana*, within a clump of *Empodisma minus* and *Astelia alpina*. 1410 m asl; coll. Feb 2007 (MELU).

Note: This minute, wiry plant is known also from New Zealand and Tasmania, where it was perhaps better known as *Kurzia quadriseta*. It has the general look of *T. herzogii* and others with very deeply divided and ± uniseriate leaves, but the stem leaves are at least 4-fid and have one to four rows of basal cells that are very short (often subquadrate), and the stem underleaves are 4–6-fid and usually have one or more lobes greatly reduced. Both *Microlepidozia* and *Frullania* type branching are present.

Confirmed for Victoria

Pallavicinia rubristipula Schiffn.

VIC: Baw Baw Plateau, Baragwanath Flat, on boggy ground in damp subalpine heathland, 1485 m asl; coll. Feb. 2007 (MELU).

Note: Scott (1985) reported *Jensenia connivens* (Colenso) Grolle from NSW, Victoria and Tasmania. However, Schaumann *et al.* (2004) noted that Scott's description, and the voucher from Tasmania on which it was based, was actually *Pallavicinia rubristipula*. As a result they excluded *J. connivens* (a New Zealand endemic) from the Australian flora, and it has been removed (along with *J. pisicolor*, a subantarctic species) from the online *Checklist* (McCarthy 2006). This meant that the only certain records of *P. rubristipula* were from Tasmania, although Scott's distribution of '*Jensenia connivens*' suggests it is more widespread. The collections cited above confirm its presence in Victoria. I do not know of any collections from NSW. It differs from all other Australian Pallaviciniaceae with a stalked thallus in having the winged part of the thallus inrolled dorsally, sometimes almost forming a tube.

A forgotten species

Jungermannia [Solenostoma] tetragona Lindenb.

QLD: Babinda Boulders, I.G. Stone s.n. (MUCV); Mt Lewis, D. Verdon 5401 (CANB); Mulgrave River, A. Cairns s.n. (MELU).

Note: This species was reported for Queensland by Vana & Inoue (1983) and confirmed by Vana & Piippo (1989) and George Scott (annotation on MUCV specimen). Schuster (2002) was apparently unaware of these records. He transferred this species to *Solenostoma* but did not cite the basionym, so his combination is for the moment invalid.

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David Meagher, School of Botany, The University of Melbourne 3010

Drepanocladus aduncus wanted

Te Waikoropupu Springs is the type locality of *Hypnobartlettia fontana* and the only known place in the world from which this species is known. Ryszard Ochrya, who described this species, placed this species into the family Hypnobartlettiaceae because of its multistratose lamina, as well as other aquatic bryophytes

with the same conspicuous character. In 1988, Wolfgang Frey and I as well as some of our students collected this species at the type locality for a molecular study. It turned out that *Hypnobartlettia* showed up in the phylogenetic tree amongst Amblystegiaceae. In other cases of aquatic bryophyte species with multistratose laminas (*Platyhypnidium mutatum*, *Ochyrea tatrensis*, *Palustriella pluristratosa*), the base sequences of these species were identical or almost so with accompanying species (*Platyhypnidium riparioides*, *Hygrohypnum smithii*, *Palustriella falcate*). This and the presence of identical sporophytes in both, *Platyhypnidium mutatum* and *P. riparioides*, lead to the conclusion that the species with multistratose laminas are somatic mutants of the accompanying species.

In the case of *Hypnobartlettia fontana*, base sequences of *Cratoneurosis relaxa* growing with the latter were compared. However, they were not related and therefore the origin of *Hypnobartlettia fontana* is still unclear.

During the 20th John Child Workshop in 2004, participants visited Te Waikoropupu Springs. Amongst the species collected there, *Drepanocladus aduncus* was listed in the report of the fieldtrip (ABN 50:3). This is an Amblystegiaceae as *Hypnobartlettia* and could be the possible “mother species” of *Hypnobartlettia*. A comparison of the TrnL base sequences of *Hypnobartlettia* and *Drepanocladus aduncus* from the northern hemisphere showed differences in three base pairs. It can however, be assumed that *Drepanocladus aduncus* is genetically polymorphous and that the populations from both hemispheres differ. It would be interesting to compare material of both species from the same locality, Te Waikoropupu Springs. Maybe this will solve the secret about the origin of *Hypnobartlettia*. Therefore I would like to ask the participants of this fieldtrip, whether they have collected *Drepanocladus aduncus* in this place and could provide material for a molecular study.

Jan-Peter Frahm, Nees Institute for biodiversity of plants, University of Bonn, Meckenheimer Allee 170, 53115 Bonn, Germany. Frahm@uni-bonn.de.

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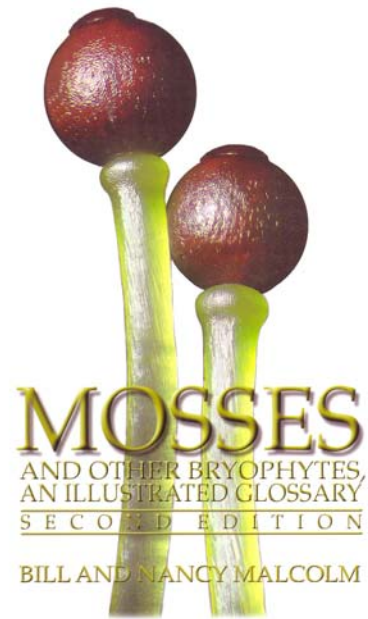
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IXth Australasian Bryophyte Workshop



The IXth Australasian Bryophyte Workshop will be held from 3rd to 8th December 2007. It will be based at Maydena (90 kms west of Hobart) on the edge of the southwest World Heritage area, Tasmania, Australia. Fully catered accommodation will be provided in cottage style facility, and laboratory spaces will be available for light microscope examination.

Participants will encounter bryophytes in a variety of vegetation types that include, gondwanan cool temperate rainforests, sub-alpine communities, button-grass sedge/land communities and wet eucalypt forests that contain the tallest hardwood trees in the world. As well, there will be sessions devoted to bryophyte groups for beginners and specialists, while some evenings will be occupied with talks and poster presentations.

Interest in the Workshop has been overwhelming and we are currently at maximum capacity with all available accommodation fully booked. Therefore further enquiries will be placed on a waiting list and should be directed to Paddy Dalton, School of Plant Science, University of Tasmania.

P.J.Dalton@utas.edu.au

A second circular will be sent in early May to those who have expressed an interest in attending the workshop.

Student support for Workshop

The success of recent Australasian workshops has resulted in the accumulation of some surplus funds. As well, sponsorship from local agencies (Forestry Tasmania and World Heritage Funding)) has provided additional monies in support of student attendance at workshops. Therefore a limited number of grants are available to currently enrolled undergraduate or postgraduate Australasian students to attend the Tasmanian workshop in December 2007.

A grant (up to a value of \$400) will assist in the cost of attendance at the workshop (registration, accommodation etc) and is provided on the basis that the student is presenting a talk or poster.

Applications from students who will be attending are now called and should submit the following details:

- Name and address of Tertiary Institution
- Current academic record
- Name of supervisor or lecturer
- Abstract or summary of presentation

This should reach Andi Cairns [andi.cairns@jcu.edu.au] or School of Marine and Tropical Biology James Cook University, Townsville, QLD 4811, no later than the end of June 2007.

