AUSTRALASIAN BRYOLOGICAL NEWSLETTER

Number 42 June 2000

Editor: Mr. P.J. Dalton, School of Plant Science, University of Tasmania, GPO Box 252-55, Hobart, Tasmania, Australia. 7001. Ph: (03) 62 267873, Fax: (03) 62 262698. E-mail: P.J.Dalton@utas.edu.au



Cover Page

The front page depicts the history of the Australasian Bryological Workshops, admittedly a little distort in geographical scale! There have been five very successful workshops, which have allowed participants to experience the bryophyte flora from the cool temperate forests of Tasmania to the warm tropical rainforests in far north Queensland. The next, 6th Australasian Bryological Workshop will be based near Sydney in 2001 and will provide a foray into the warm temperate vegetation of Australia. If you are interested then preliminary details of this workshop and the contact convenors can be found in later pages of this newsletter.

Newsletter is now Electronic

Discussions at the last Australasian Bryophyte Workshop on the future of the newsletter centred on two issues. The number of people who currently receive the newsletter can be gauged by the breakdown of the mailing distribution; Australia (48), New Zealand (23) and Overseas, which include North and South America, Europe, United Kingdom. and the sub-Continent (51). As these numbers continue to steadily increase then there is more demand to make the newsletter readily available. Secondly, a major factor in providing the newsletter is the ever rising cost of postage which has been supported in the past by generous contributions from time to time.

To help reduce costs and have the newsletter quickly available, it was decided that I explore the option of providing the newsletter in an electronic version. Although it has taken some time I am pleased to say that this issue is now available via the Internet – can we claim the first electronic bryophyte newsletter in the Southern Hemisphere!

To access the newsletter, it is attached as a link to my home page at the University of Tasmania. The School of Plant Science website is as follows:

http://www.utas.edu.au/docs/plant science/

Or you may locate the newsletter directly:

http://www.utas.edu.au/docs/plant science/ABN/index.htm

I am fully aware that many of our readers may not have access to the Internet and I will continue to produce the newsletter in its current mode. However some may be content with just an electronic version, and in the next issue I will provide a circulation update sheet with a response to indicate whether you wish to continue receiving the newsletter in hardcopy and/or electronic form. Needless to say that as more readers take the electronic version then time will be saved in printing, collation and preparation for posting – but these are not major considerations.

If there are any problems in accessing the newsletter then let me know. Irrespective I trust our newsletter continues to be a useful forum for all interested in bryophytes in our geographical area. Maybe with the online access, it may encourage more of our Australasian readers to submit items of news, research and opinions. I am sure that many of our overseas readers would like to know what bryological activities occur down under so please don't hesitate to contact me with your submissions, comments or queries.

Paddy Dalton, Editor.

RESEARCH NEWS

Brevianthus flavus new to New Zealand.

Brevianthus flavus has been regarded as a Tasmanian endemic (Schuster and Engel, 1982) but has now been found in New Zealand, at a single site in Westland. The specimen is sterile, but fits the description of Brevianthus flavus in Engel and Schuster (1982).

Brevianthus flavus was originally described as Jackiella flava by Grolle (1961) but was placed by Engel and Schuster (1981) into a family of its own on the grounds that it has gynoecia and androecia on short branches, lateral intercalary branching only, no underleaves, scattered rhizoids, undivided and succubously oriented leaves, 3-4 stratose capsule walls, an undifferentiated seta, and tuberculate to bacculate spores (Engel and Schuster, 1982). They placed the family near to Chonocoleaceae, a family of two species, Chonocolea andina and C. dollingeri, of South America and tropical North America respectively (Engel and Schuster, 1982).

Engel and Schuster (1982) state that the habitat in Tasmania is "corticolous on *Phyllocladus*, *Anodopetalum*, *Atherosperma*, *Eucryphia*, and *Athrotaxis*, often intermixed with *Acrochila biserialis*." However, one specimen at the Hobart herbarium (J. Jarman, HO 445260) is from a "crevice in [a] large rock outcrop" on the Sentinel Range. The New Zealand collection was collected from a more exposed site than this suggests. However, it was growing with *Jungermannia orbiculata*, a large-leaved liverwort which requires fairly constant moisture.

It is tempting to speculate on the biogeography of *Brevianthus*: has it been present in New Zealand as long as it has in Tasmania? If not, has it dispersed from Tasmania to New Zealand or the reverse? It appears to be much more common in Tasmania than New Zealand, but can that be taken as evidence that it originated in Tasmania? In my opinion, the granite substrate and open vegetation of the site at which *Brevianthus* was found places it in the same class as some of the species that occur in both Tasmania and the coal plateaux at Denniston and Stockton. These plateaux are small areas, which provide a habitat very similar to extensive areas in Tasmania. For this reason, I suspect *Brevianthus* dispersed in geologically recent times from Tasmania to New Zealand. The New Zealand site has been heavily disturbed during the last c. 100 years by coal mining. Further searching for it in the area is required to determine whether it is also present as an epiphyte or as a lithophyte in less disturbed areas.

Collection details:

Westland, Croesus Track, NZMS 260 K31 780733, 320 m.

Habitat: On weathered granite rock face in lightly shaded situation under *Leptospermum scoparium* + *Lepidothamnus intermedius* scrub. Associated species: *Jungermannia orbiculata*, *Riccardia bipinnatifida*, *Drucella integristipula*. D. Glenny 8237, 5 June 2000 (CHR).

References:

Engel, J. J. and Schuster, R. M. 1981 Austral Hepaticae XV. Brevianthaceae, fam. nov. and *Brevianthus*, gen. nov. from Tasmania. *Phytologia* 47: 317-318.

Engel, J. J. and Schuster, R. M. 1982 Austral Hepaticae XV. Brevianthaceae: a monotypic family endemic in Tasmania. *The Bryologist* **85**: 375-388.

Grolle, R. 1970 Eine neue *Jackiella* aus Tasmanien. *Journal of the Hattori Botanical Laboratory* **33**: 222-224.

David Glenny, Landcare Research, Lincoln, New Zealand.

NEWS and NOTES

<u>Tamas Pocs</u>, Emeritus Professor and Head of Research Group for Bryology at the Hungarian Academy of Sciences, was a visitor to our shores earlier this year. Tamas is undertaking "A Taxonomic revision and Phytogeographical evaluation of the genus *Frullania* Raddi (Hepaticae) in Australia and the adjacent islands." This work is being supported by ABRS and by Hungarian Institutions towards the Flora of Australia.

Last year he spent two months fieldwork with Heinar Streimann from York Peninsula to South Gippsland. In February of this year Tamas was collecting in northern New South Wales with the assistance of Elizabeth Brown, and in March he spent two weeks fieldwork in Tasmania where some collecting was accompanied by Paddy Dalton. We look forward to the results of Tamas' research.

<u>Niels Klazenga</u> has been awarded the Pacific Dunlop Fellowship at the National Herbarium of Victoria (MEL) where he will undertake research into the Australasian species of *Dicranoloma*. In April, he visited Tasmania as part of a Fungimap Foray near Mt. Field National Park. Together with Paddy Dalton, field collecting of *Dicranoloma* species was undertaken, in particular *D. eucamptodontoides* from button-grass sedgeland.

The 16th John Child Bryophyte Workshop:

This year's workshop will be at Blackball, near Greymouth in Westland from Thursday 26th October to Tuesday 31st October. The main focus of the workshop will be the Croesus track behind Blackball. Other trips are likely to be the Craigieburn pakihi, Moonlight Valley, Sewell Peak, Mt. French or Mt Te Kinga south of Lake Brunner, Camp Creek, and possibly to places on the Punakaiki coastline.

<u>Convenors: David Glenny and Geoff Spearpoint</u>, Landcare Research, PO Box 69, Lincoln, New Zealand. <u>GlennyD@landcare.cri.nz</u> At the time of publication the workshop was fully subscribed.

The VIth Australasian Bryophyte Workshop

The 6th Australasian Bryological Workshop will be held from the 20th – 26th September 2001. The workshop will be based at the Berringa Environmental and Conference Centre, Grose Vale, in the lower Blue Mountains, approximately 70km west of Sydney. The conference centre is adjacent to Blue Mountains National Park in which massive sandstone plateaus with sheer cliffs drop into deep valleys where there are more gentle slopes of shale. At a number of sites, such as Mt. Tomah, Mt. Wilson, Mt. Banks, there are volcanic intrusions. Vegetation is dominated by *Eucalyptus* woodland and forests, with closed forests (rainforests) in shale gullies and on some basalt caps. Hanging swamps are quite common on some sandstone plateaus.

The workshop will include field excursions, laboratory identification workshops and paper presentations. Field trips are planned to include Jenolan Caves limestones, Megalong Valley rainforest and a number of other interesting sites in the Blue Mountains National Park, for example, Mt. Tomah Botanic Gardens and the Three Sisters at Katoomba

The workshop closely follows the Flora Malesiana conference, and has been timed to coincide with the AV-CC mid-semester break in Australia. For further information the convenors are;

<u>Elizabeth Brown</u>, National Herbarium of New South Wales, Mrs. Macquaries Road, Sydney, NSW 2000. E-mail: elizabeth brown@rbgsyd.gov.au

Alison Downing, Department of Biological Sciences, Macquarie University, NSW 2000. E-mail: Adowning@rna.bio.mq.edu.au