

TBG Newsletter 13 - August 1998

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TBG Annual General Meeting

The AGM of the TBG will be at Loughborough on 19 Sept. 1998, following the main BBS AGM.

AGENDA

1. Notes of last AGM
2. EWJ Tropical African hepatic flora
3. Uganda Expeditions
4. Future TBG Expeditions
5. African Generic Flora
6. Updates
 - Malawi
7. Election of executive
8. Any other business
9. Place & date of next AGM

Updates/comments on the above agenda items:

Eustace Jones' tropical hepatic flora

Omer Kerckhove, the botanical artist at Brussels Botanic Garden, has completed 20 plates for the flora, under the direction of Herman Stieperaere. The drawings are of taxa which are poorly illustrated in the published literature, or not at all. Many thanks to Omer and Herman for this work, which is very much appreciated, and is a most valuable contribution to this project. It has lately been decided to include more illustrations, and Malcolm Watling has agreed to do this further work. As before, drawings will be made from West African specimens from Jones' herbarium, so far as possible.

Future TBG expeditions

At present, no future expeditions have been planned. Views are sought on this matter!

A generic flora of sub-Saharan bryophytes

We were unsuccessful in our application for funds from the Darwin Initiative for a bryophyte guide for Africa, which would consist of descriptions, illustrations and keys to all families and genera of mosses and liverworts in tropical Africa. Darwin were complimentary about the quality of the application, but thought that insufficient preparation had been made for the three workshops that would be required to try out the book in the field. These arrangements are now being made, and we will re-apply in November. At present we are hoping to use Makerere University Field Biology Station in Kibale forest, Uganda, a field station in Limbe, Cameroon, together with a locality in southern Africa, still under discussion.

There will be about 358 moss genera in 75 families and 131 hepatic genera in 47 families to be dealt with, and it will be based on a neotropical guide currently in press. Around three quarters of the neotropical families and genera occur also in Africa, but often there are few if any species in common, which means that specific details and illustrations will need to be rewritten. In the previous Newsletter it was mentioned that in order not to conflict with the BBS' charitable status, it had been thought necessary to apply for a grant independently of the BBS, and Brian O'Shea and Martin Wigginton set up a company, Tropical Bryology Research, to manage the project. The objective is now to start during 1999 and finish in about two and a half years.

Updates on Malawi papers

Nine papers have now been published in the *Journal*, and fourteen are in progress.

IBC99

IBC99 - International Botanical Congress 1999, St Louis, Missouri, August 1999

The IBC99 programme is now becoming clearer, and some of the (main) symposia look very interesting. Unfortunately the IBC99 web site makes very difficult the task of finding out what symposia there are. However, I managed to find the following:

- *Moss diversity: a global perspective*. Organised by Steve Churchill & Brian O'Shea
- *Evolutionary biology of the Bryopsida: a synthesis*. Organised by Bernard Goffinet and Terry Hedderson.
- *Current concepts of phylogeny in liverworts, hornworts and takakiophytes*. Organised by Barbara Crandall-Stotler and Jiro Hasegawa.
- *Bryophytes: model systems for cell and molecular biology*. Organised by Melvin Oliver and David Cove.
- *Species relationships in bryophytes: new approaches*. Organised by Robert Wyatt and Hélène Bischler.

- *Bryophyte and lichen rarity: pattern, causes, and conservation*. Organised by: Clifford Smith, Lars Söderström and Dale Vitt.

Full details of how to enrol for the Congress are on the IBC99 web site:

<http://www.abc99.com>

Contact me for more details if you don't have access to the internet.

Uganda Expeditions

1997 Expedition. Considerable efforts have been made by some people, as witnessed by the paper currently in press listing well over a hundred species of mosses and liverworts recorded for the first time from Uganda. Others have yet to make much impact on their collections because of other commitments.

1998 Uganda course The course on 'Introduction to Bryology and Tropical Cryptogam Ecology' which ran from 22 January - 2 February at Kibale National Park was quite successful, if eventful! An account will appear in the TBG report in the Feb. 1999 *Bulletin*.

BBS TBG Uganda visit 1998: Mt. Elgon

Many thanks to Ron Porley for the following account:

This was the final field trip of a three-year project supported by the UK Darwin Initiative, to study the bryophytes of montane forests in Uganda. The effort in 1996 was focused on Bwindi Forest NP, and in 1997 a number of montane forests were visited including Budongo, Kibale, Itwara and Kasyoha-Kitomi. It had been the intention in 1998 to concentrate on the montane forest belts within the Rwenzori NP, but due to political instability locally, the Park was deemed insecure and closed to tourists and researchers alike. Therefore, a contingency plan redirected the operation at the eleventh hour, and we made arrangements to study the little known montane forest of the Ugandan side of Mt. Elgon NP, an ancient mountain of volcanic origin on the Uganda-Kenya border. Tamás Pócs and Kåre Lye had spent a couple of days collecting along the Sasa Route in 1997; we spent 14 days collecting along the Piswa Route in the northern part of the Park, so covered much new ground. The Ugandan part of Mt. Elgon NP covers some 1145km², and therefore the present study can only be a preliminary assessment of its bryological interest.

Personnel participating in the third visit to Uganda were Jeff Duckett, Howard Matcham, Catherine La Farge-England from Canada, and Ron Porley (leader). Between us we had a fair experience of tropical African bryophytes. Catherine was especially keen to collect *Leucoloma*, a group she has worked on extensively including a revision of the African taxa. Much to her disappointment, though, no *Leucoloma* was found on Mt. Elgon. However, the genus was new to Uganda from the western forests during 1997. The reasons for the absence of this group in the montane forests of Mt. Elgon are obscure, since it occurs on similar volcanic mountains of east Africa, Mt. Kenya and Mt. Kilimanjaro. In addition to elevation differences, one factor could be that the forests are less humid than those occurring along the western arm of the Rift Valley.

This hypothesis is supported by the striking observation that, unlike the western forests studied in the previous years, there was an almost total lack of epiphylls. Epiphyllous Lejeuneaceae were found on just two occasions, on *Podocarpus*. Also inexplicably absent, or at least scarce, were Calymperaceae, *Leucobryum*, ecostate *Fissidens*, *Schlotheimia*, *Colura*, *Chandonanthus*, *Mastigophora* and even normally abundant genera such as *Porothamnium*, *Porotrichum* and *Pilotrichella* (although in Africa this may be *Orthostichopsis*). However, in the montane forests of Mt. Elgon many taxa were common that were rare in the western forests. These include *Prionodon ciliatus* which was in places luxuriant, and *Hylocomiopsis cylindricarpa* was

frequent. *Rhizofabronia* was also found, and, for the first time in our experience, not on tree-ferns. Rock outcrops are a conspicuous feature of Mt. Elgon, and *Grimmia* was very much in evidence, particularly *G. laevigata*. At elevations of 4000 m and above *Herbertus* was frequent on the mist-clad peaks of the caldera rim.

We ensured a representative cover of afro-montane forest types including *Olea africana* forest, *Podocarpus* forest, *Hagenia abyssinica* - *Rapanea melanophloea* forest and the giant tree-heath zone. A detailed study was made of the *Dendrosenecio* forests in the Afro-alpine zone. These support a relatively low diversity but nevertheless interesting epiphytic flora, including *Tortula*, *Orthotrichum*, large masses of *Antitrichia kilimandscharica*, and putative *Leptodontopsis*. We also collected in other habitats on Mt. Elgon, and in a flushed high altitude grassland area Jeff collected *Haplomitrium*, possibly *H. gibbsiae*. Wet cliffs were very good for thalloid hepatics, including *Targionia*, *Asterella* and *Plagiochasma*. On an earth bank, just outside the boundary of the park, we found *Notothylas*, new for Uganda.

On balance the expedition was very successful. A constraint was having to camp at designated sites; this meant long treks in and out to get to specific collecting points. However, the most serious 'problem' was to await for our last day in Uganda. Despite following all the correct procedures, and confirming arrangements on our arrival in the country, we were quite unexpectedly refused an export permit. With great reluctance we had to fly out that evening leaving our collections behind. We were however able to store them safely with Derek Pomeroy of Makerere University, and hopefully the misunderstanding with the authorities in Kampala can soon be resolved and our embargoed bryophytes released and flown back to England. Finally we would like to acknowledge Nick Hodgetts and Martin Wigginton for help with planning and acquisition of maps.

Ron Porley

Uganda Publications Although there is much identification work still to do, we are already in a position to publish some items of particular note, for instance a list of bryophytes new to the Uganda list. We have decided to have a numbered series of papers (as for Malawi), although one was sent for publication before this was agreed. The list is on the TBG web page, but the papers in the list so far are as follows:

- Hodgetts & Goffinet: *Hypnodontopsis* (Thér.) H. Rob., a genus and species new to Africa (already published in *J. Bryol.*)
- Wigginton: & Hodgetts: Introduction and localities.
- Porley, O'Shea, Wigginton, Matcham, Hodgetts & Stevenson: New and interesting records for Uganda, 1.
- O'Shea: *Phyllodon truncatulus* (Müll. Hal.) Buck is replaced in Africa by *Phyllodon truncatus* (Welw. & Duby) Buck (Hypnaceae, Bryopsida)

The paper on 'new and interesting records' includes over a hundred taxa new to the Uganda list, including: *Didymodon rigidulus* var. *rigidulus* (Queen Elizabeth National Park, new to Africa), *Scopelophila ligulata* (Kilembe copper mine, second collection for Africa), *Physcomitrella patens* var. *magdalenae* (Bwindi National Park), *Cephaloziella garsidei* (Kilembe copper mine), *Chonecolea ruwenzorensis* (Bwindi National Park), and *Lopholejeunea revoluta* (Mpanga nature reserve), all which were hitherto known only from the type collection, and *Frullania vandenberghenii*, otherwise known only from Madagascar. In addition there are records (e.g. *Papillidiopsis complanata*), where it is the first use of the name in Africa, but where there are likely to be earlier collections masquerading under other names.

A second paper of new records has now been started.

Additions to the BBS TBG World Wide Web site

All TBG documents are available on the TBG web site, and new documents are now being added directly to the

site, and will not be available as printed documents unless you request them specifically (when you will be sent a print of the web page, rather than a word-processed document). The exception to this is the newsletter, which will still be mailed to those who want it. Don't forget - the page is at:

<http://www.rbge.org.uk/bbs>

The following additions have been made to the web site:

- Demaret's later additions to the *Cyclodictyon* key (doc. 35) have been added
- A few more contact details of members have been added or updated. Only those who have specifically authorised this have their details available. Let me know if you want your contact details adding, and be specific about what you want (home/work address, telephone number/fax number, email address etc.)
- All TBG progress reports up to that for 1997 have now been added.
- The Malawi publications list has been updated.
- The Uganda expedition additions include a list of planned publications and a list of taxonomic responsibilities for all moss and liverwort families.
- The key to African Sematophyllaceae has been updated.
- Documents 53 - 59 have been added:
 - 53- *Key to African Hypnaceae (Petit, 1978)*
 - 54 - *Uganda taxonomic/distribution publications*
 - 55 - *Uganda taxonomic responsibilities*
 - 56 - *Papers in the series 'BBS Expedition to Mulanje Mountain, Malawi'*
 - 57 - *Processing of Uganda bryophyte collections*
 - 58 - *Processing of Malawi bryophyte collections*
 - 59 - *Newsletter 13*

Documents 57 & 58 resulted from a concern that there was no protocol for managing the identification of Uganda collections - it had been left up to individuals to identify their own material, and as result effort wasn't being used its full advantage, with the possibility of duplication of effort, different people contacting experts about the same group etc. Such a process had been in place for the Malawi collections, but never formally published. Both are now available.

News of members

* **Angie Newton** has now been appointed Bryology Researcher at the Natural History Museum, (to succeed Alan Eddy, who retired earlier this year) and starts in September. We look forward to hearing more about the scope of her new job (see change of addresses).

* **Michelle Price** is continuing her PhD studies at Missouri Botanic garden, on neotropical *Holomitrium*; also studying for a PhD at MBG, **Zach Magombo** (a participant in the TBG Malawi expedition), is to revise *Floribundaria* of the world.

* **Malcolm Watling** has been helping with the identification of Malawi Hypnaceae, and has concentrated initially on the genus *Rhacopilopsis*, with the intention of producing an illustrated account of the genus.

* **Brian O'Shea** visited Ben Tan in Singapore for 2 weeks in June to work on African Sematophyllaceae, and also helped in inventorying the mosses of Pulau Tioman, a small island off the Malayan coast with some original forest.

New members/Change of address

Dr. A.E. Newton, Botany Department, Natural History Museum, Cromwell Road, London SW7 5BD.

Alfons Schäfer-Verwimp, Mittlere Letten 11, D-88634 Herdwangen-Schnach, Germany.

Helsinki course and workshop on tropical bryology

Helsinki course on Tropical Bryology, and Workshop on the taxonomy of Hypnaceae and Sematophyllaceae 23 Mar - 3 Apr, 1998.

The EU programme 'Advance Instruction in Bryology' from the Department of Ecology and Systematics, Division of Systematics, University of Helsinki, organised by Timo Koponen, is aimed at postgraduate and postdoctoral students. The course aim was to discuss research in systematics, phytogeography, conservation and ecology of tropical bryophytes, and methods in the field, herbarium and laboratory, as well as to impart identification skills. The course ran over two weeks, with the middle weekend being the workshop on Hypnaceae/Sematophyllaceae. The teachers were Johannes Enroth, Jaakko Hyvönen, Timo Koponen, Jette Lewinsky, Dan Norris, Pekka Pakarinen, Sinikka Piippo, Tamás Pócs, Ben Tan and Jiri Váxa. In addition, Lars Hedenäs, Micha Ignatov, Naoki Nishimura and Brian O'Shea were involved with the workshop. The workshop also involved the students making short presentations of their own work. The documentation given to students was based on the course organised by Jan-Peter Frahm and Yelitza Leon in Venezuela in February/March 1997, but supplemented with additional material relating to the course syllabus. The workshop sessions and invited lectures will be published in *Bryobrothera*.

Tropical Bryology

Volume 14 (136 pages) was published on 15 April 1998. The next volume is expected towards the end of the year. Contact Jan-Peter Frahm if you wish to become a subscriber to this comparatively cheap journal (25 DM for volume 14 - less than £10).

Other publications

Buck, W.R. 1998. Pleurocarpous Mosses of the West Indies. *Memoirs of the New York Botanical Garden* **82**. 400 pp. Available from Scientific Publications Department, New York Botanical Garden, Bronx, New York 10458-5126, USA for \$49.

This outstanding and very reasonably priced book is the result of almost 20 years research in the Caribbean. It keys, describes and illustrates in some detail all the pleurocarpous mosses of Bermuda, the Bahamas and the West Indies, a total of 30 families, 125 genera and 254 species. Each family, genus and species has a full description, and for each species there are details of the world distribution, habitat and altitudinal range, and a general discussion including identification hints. Each species is beautifully illustrated by Bobbie Angel. The whole is printed in quite a small font, so the amount of information is considerable. This will be a book of great value to anyone working on tropical mosses. Buy it now!

Magill, R.E. & van Rooy, J. 1998. Flora of Southern Africa. Bryophyta. Part 1. Mosses: Fascicle 3 - Erpodiaceae to Hookeriaceae. (pages 445-622). Available from.: Bookshop, National Botanical Institute, Private Bag X101, Pretoria 0001, Republic of South Africa, price 75 Rand. Also available from Natural History

Book Service, 2-3 Wills Road, Totnes, Devon, TQ9 5XN (or email on sales@nhbs.co.uk), for around £8.

We have been working with a typescript of the text of this volume for the last 7 years, but it makes a world of difference finally seeing the text with illustrations. In particular it is a great help having a full treatment of the Orthotrichaceae (about a third of the book) considering the great difficulties this bloated family provides in Africa. Fortunately the binding is much more robust than that of the earlier two volumes. The authors are aware of the keen interest in seeing the final (and most difficult?) volume!

Allen, B. Moss Flora of Central America. Part 2. Publ.: Missouri Botanic Garden.

This book has been advertised for some time, but is not likely to go to press before the end of this year.

In an earlier newsletter (no. 11, October 1996) I mentioned Asher's reprints of books such as Müller's *Synopsis Muscorum Frondosorum*. Hans Kruijer has confirmed that Asher's reprints are available also in other De Slegte bookshops, including the one in Leiden (Breestraat 73; tel +31 71 5122007, fax +31 71 5148508), and they accept mail orders, with payment in advance.

If anyone is aware of other books of interest to TBG members, please give me details.

Brian O'Shea, 26 August, 1998

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