TBG Newsletter 1 - January 1991

At the AGM on 22nd September, a newsletter was promised, to keep members of the TBG up-to-date on what members were doing. I had hoped that this would be produced earlier, but it seemed sensible to delay it until further information was available about the Malawi trip. This is covered in more detail below.

Enclosed with this newsletter are several other documents. I have tried to gather together all the TBG pieces of paper that members might be interested in, and there is now a 'List of Available Documents' which is attached. Please ask for copies of any you would like to see, but all members are being sent copies of numbers 8 (Objectives), 9 (membership list), 10 (AGM), 11 (available documents), 12 (workshop), 14 (African literature).

The BBS Council is keen to see that its sub-committees and working parties are active, and so the President and Secretary (Mark Hill and Martha Newton) are both shown as members of the group and will receive all material that is circulated. In addition, the BBS at large will be kept abreast of our activities via the Bulletin, and I will be submitting an item to the Editor for the February edition.

An area we identified very early as needing work was the processing of existing tropical collections. David Long has now produced some guidelines for this, but to my knowledge nobody is yet pursuing this. Any offers? The list of UK herbaria with tropical collections is being added to slowly as information becomes available, and there may be one near you that requires your assistance.

The membership list contains all those who have at any time expressed an interest in the TBG. If you are not interested, please let me know so I can remove your name. Also, the addresses are in some cases taken from address lists which may not be up to date. Please let me know of any corrections necessary. Similarly I have added phone numbers where I know them; please fill in the gaps and make corrections.

Mt. Mulanje Expedition

Planning for this trip is progressing well. There are now 8 people interested, five from the UK (Royce Longton, Nick Hodgetts, Brian O'Shea, Ron Porley and Martin Wigginton) and three from Africa (Shaun Russell (leader), Liz Kungu (Kenya) and Z.L.K. Magombo (Malawi)). The trip will be from 12th June to 3rd July, and probably 4 excursions each of 3 to 4 days will take place, with single days between for processing specimens. Each excursion will be based on a mountain hut. The trip will take place during the Malawi winter, when the mountain weather is likely to be similar to that in Britain (with quite cold nights). It will be at heights of about 700m at the base to about 2000m.

An expedition proposal has been prepared which is being used as a basis for fund raising. The objectives of the expedition include making a comprehensive collection of bryophytes from the mountain from a variety of habitats and publishing a bryoflora, identifying sites of special bryological interest and making observations on the biology of ecologically important, rare or threatened species or communities, and promoting in any other way possible the conservation of the bryoflora of the mountain and the ecosystem of which it forms a part.

The particular interest in the mountain is two fold: firstly, its position as a biotically isolated island in the Afro-montane archipelago which extends from Ethiopia to the Cape, in which the bryophytes are virtually unknown (only about 80 records are published); and secondly, the mountain is subject to the familiar 'logging vs. conservation' dilemma, and confirmation of its bryological interest should help to

confirm the need to designate it as an IUCN Biosphere Reserve. It currently isn't even a national park, despite its tourist potential.

The UK-based members will be meeting again at the end of February to confirm progress and discuss the more detailed logistics.

Next Newsletter

This Newsletter is not very long, but not a lot has happened in the last three months - and the workshop itself (22nd September) was a major milestone in establishing ourselves as a group. The next newsletter will probably be after Easter, and will contain further information on the Malawi trip, together with anything else you let me know about. Please also give your suggestions about what sort of thing you would like to see in the newsletter.

Brian O'Shea (coordinator)

TBG15/news1 - 03.01.1991 - BJO

Newsletter 2 - August 1991

- 1. **Mt. Mulanje Expedition** The expedition was very successful, and about 4500 specimens from the four corners of Mount Mulanje (and all points between) are now at Reading University being redried and sorted, prior to being returned to the collectors. One parcel of the 25-30 we brought back has still not arrived. A more detailed report will be given later, but a wide range of habitats were visited, from the base of the mountain to the top of Sapitwa, the highest peak (2998m). Collections often were made in ignorance of what we were collecting, but nevertheless, we feel we made a representative collection from most habitats. Constraints of time meant that we were frequently collecting material without first being able to examine it closely; and we may find that the most interesting collections were made when we had time to examine an area thoroughly. We certainly learned a lot about how to organise a group collecting expedition, and were quite surprised at the amount of time and effort it took: it was almost a full time job for one person during the main collecting period, and took several days before and after the main collecting trip to make preparations and organise the return of the specimens. We must thank Shaun Russell for the incredible efforts he put in to keep us all going, and also Cathy and Stephen Temple, who organised our resupplying whilst up the mountain.
- 2. We hope to arrange a workshop to make the first attack on the collections, preferably with some expert help. We have been fortunate enough to have offers of assistance in confirming identifications: a list will be published, but if anyone is prepared to offer their expertise of a particular group, or to suggest some names, please let Royce Longton or me know. There will be a talk (with slides) on the trip at the September AGM, and there will also be an exhibit at the conversazione.
- 3. Before we left I was able to complete the first draft of the *Provisional List of Malawi Bryophytes*, containing about 280 taxa. I received a further list of about 20 new bryophytes from Tamás Pócs on the day before we left, so there is obviously plenty of scope yet for increasing the list. Collections made at the AETFAT conference in April, like those of Tamás Pócs, should add significant numbers.
- 4. **Documents** Revised versions of the following documents have been produced:
 - **9 Membership List**. Addition of several new members, removal of Alan Orange, and change of address for Heike Hoffman.
 - **13 Provisional List of Malawi Bryophytes**. Addition of extra moss records, and a first draft of the hepatics list. (Still many records to add issued as preliminary guidance for Malawi trip.)
 - 14 Literature for identifying African Bryophytes. I have prepared a new version of Tamás Pócs' quick reference list of literature to identify tropical African bryophytes with all the full references. This has now appeared in *Tropical Bryology* 4, but because the editorial process removed the emboldening of the key references, a word-processed version is available to replace the previous version. The original document (without the references) has now been published as an addendum to the *Bryologia Africana* booklet providing information for potential contributors.
 - **16 A key to the African species of** *Campylopus*. New. Translation into English by Jan-Peter Frahm of the key in his African *Campylopus* book. By special request of Robin Stevenson! Robin has also prepared an alternative version with couplets a la Smith, rather than the inset 1, 1* of Frahm. Please state which version you want.

Martin Wigginton is also working on a translation from the original French of Petit's key to the genera of African mosses. When complete, it will be added to this list.

- 5 **Project volunteer(s) needed** There is a collection of some 5000 bryophytes from Uganda and Tanzania, made by Francis Rose in 1961, available for study in the BM. All specimens are numbered, the notebooks are with the collection, and many are named to genus. The collections are from all sorts of habitats from savanna to tropical rainforest and mountain tops. Francis also has his own notes to supplement this. Considering the collector, there are likely to be a number of very interesting specimens. Would anyone like to take this on as a project? It would involve checking the current state of the collection, providing any identifications that are possible, and arranging for experts to confirm identifications.
- 6. **Annual General Meeting** Our AGM will take place in Sheffield following the BBS AGM weekend on 14th September. Could I please have any items for the agenda? Also, the TBG has not met as a working party since February last year. If anyone feels there are matters we need to discuss, please let me know and I will arrange a meeting.

7. Next Newsletter Please let me know what you are up to, for the next newsletter, or if you any experience, advice or ideas to share. And if anyone is looking for something to do, let me					
Coordinator: Brian O'Shea					
TBG17/news2 28.08.1991					

Newsletter 3 - July 1992

1 **Mt. Mulanje Expedition** Reasonable progress is being made in processing the Malawi specimens - perhaps 20% have been looked at in about 9 months. This may not be a lot, but we are all working in our spare time in the evenings and at weekends. It has taken us some time to become familiar with the plants, and although some can now be recognised instantly, other collections may take hours to split up into component species and it may still not be possible to identify all the taxa involved.

We held a workshop in March to review how far we had got, and to share our experiences. This was held at Reading University, and was organised by Royce Longton, and was attended by Nick Hodgetts, Brian O'Shea, Ron Porley and Martin Wigginton. Although Eustace Jones was unable to attend, he provided a copy of a draft of his hepatic flora of West Africa, which proved to be of enormous use (see below).

We were able to establish out initial strategy on publications, as well as distributing responsibility for particular groups of plants to individual expedition members. The first publication will be a general introduction to the expedition (including geology, vegetation, relationship of flora with rest of Africa, habitats and substrates, bryological exploration, collecting methods, collection sites etc.), the second will be a checklist of Malawi bryophytes (draft copy already published as TBG publication 13), and subsequent ones will be based on particular taxa or taxonomic groups. Responsibility was awarded to Royce Longton for *Sphagnum*, Nick Hodgetts for Andreaeaceae, and Brian O'Shea for *Campylopus*. A full list of all families and their 'owners' has now been produced, but there are still many gaps waiting to be filled if anyone is interested. It is hoped that these first genera/families may become the next publications.

The first batch of specimens sent to our *Campylopus* referee (Jan Peter Frahm) yielded one species possibly new to science, and another found in only its second locality - so even large and easily recognisable mosses like this can provide exciting results.

- 2 **Hepatic Flora of West Africa** Eustace Jones has been working for the last few years on a hepatic flora of West Africa, and we were privileged to use a draft typescript at the Mulanje workshop mentioned above, and workshop participants now have copies of it. It has proved to be extremely useful, and the observations that supplement the detailed descriptions are a mine of information that make even many of the particularly difficult genera quite approachable. Some of the text has been heavily revised and there are as yet no drawings, but it provides the most authoritative overview of African bryophytes that we have seen so far.
- 3 **Documents** Revised/new versions of the following documents have been produced:
 - **09 Membership List** (Issue 4, 2pp, 14.07.1992) (Zac Magombo and Tamas Pocs added, Ron Porley and Shaun Russell change of address, Brian O'Shea change of work phone number)
 - **18 Key to African pleurocarps (Petit, 1978)** (Issue 1, 22pp (incl. 9pps of illustrations), 10.04.1992) (Keys for the determination of families of pleurocarpous mosses of Africa. Translation by Martin Wigginton and Robin Stevenson of **Petit, E. (1978)**. Clefs pour la determination des familles et des genres des mosses pleurocarpes (Musci) d'Afrique. *Bull. Jard Bot. Nat. Belg.* **48**:135-181.)
 - **19 Checklist of Liverworts of sub-Saharan Africa** (Issue 2, 44pp, 05.07.1992) (A Draft Checklist of Liverworts of sub- Saharan Africa, excepting The Cape, Atlantic and Indian Ocean Islands. Compiled by Martin Wigginton.) NB The latter two documents (18 & 19) can be obtained directly from Martin Wigginton (see enclosed address list).
- 4 **Francis Rose's African collections** In the last newsletter, I mentioned Francis Rose's 5000 collections from Uganda and Tanzania, asking for assistance in the further processing of this material. Please note that any volunteers would need to arrange this through the Natural History Museum, and I would suggest Len Ellis (0171-938 8856) as a first point of contact. Alan Harrington has already started work on the hepatics

collections.

- 5 **Kenyan specimens/records** Liz Kungu (Botany Department, Nairobi University, PO Box 30197, Nairobi, Kenya) would like to know of any Kenyan collections, and would be happy to look at Kenyan material. Liz recently had a collecting trip to Mount Kenya with Tamás Pócs.
- 6 **Equadorean bryophytes** Robin Stevenson has been given a contact in Equador of someone who would be happy to collect bryophytes for us any offers for involvement in S. American bryology? James Savage is British, but resident in Equador he is a good naturalist, and specialises mainly in insects. He is very keen to collect any sort of biological material, and is willing to send it back to interested parties in the UK: *James Savage, Apartado 17-21-01145, Quito, Pichincha, Equador*
- 7 **Growing tropical bryophytes** Derek Harvey (of the Biology Department, Palmer's College, Grays, Essex. 01375-370121) is trying to build up a collection of live tropical bryophytes, and wants a source of supply. He has been given Michael Fletcher's name.
- 8 **Tropical collections in the UK** We still have no-one who has offered to update the rather limited information we have on tropical collections in the UK. I have the original (extremely thin) text (TBG Document 4) which is now 2.5 years old, and some information that should be added, but it really needs someone to attack with a bit of vigour. Volunteer required.
- 9 **Flora Neotropica** The bryophyte volumes of Flora Neotropica are drifting out rather slowly: Monographs published so far:
 - 50 Plagiotheciaceae (Buck and Ireland)
 - 54 Dicranaceae: Campylopodioideae, Paraleucobryoideae (Frahm)

Almost ready (being printed?):

- 58 Calymperaceae (Reese)
- 59 Leucophanaceae (Salazar Allen)

Other volumes are complete and 'in press', e.g.

• Lejeuneaceae: Ptychantheae and Brachiolejeuneae (Gradstein)

The first two are currently on offer from the New York Botanical Garden at 25% discount (Monograph 50 is reduced from \$7.00 to \$5.25, and 54 is reduced from \$45.50 to \$34.00). There is in addition a postage and handling fee for non-US orders of \$4.00 + 5% of book cost. Send orders to:

Bryophyte Publications, Scientific Publications Department, The New York Botanical Garden, Bronx, NY 10458-5126 USA

There is also a Moss Flora of Mexico due in 1993 from NYBG - two volumes edited by Sharp, Crum and Eckel, at a prepublication price of \$165.00. Credit cards accepted!

- 10 *Bryologia Africana* No visible progress is being made with this, although a guide to contributors was produced around a year ago, and some authors have been identified. Presumably Bob Magill is still tied up with completing his South African bryophyte flora.
- 11 **Annual General Meeting** I must apologise for there being no official TBG AGM in Sheffield following the BBS AGM on 14th September last year; this was my fault, caused by conflicting demands on my time. I will attempt to do better at this year's AGM on 26th September, again following the BBS AGM. Could I please have any items for the agenda? Not a lot seems to be happening apart from the Mulanje work (and whatever people

12 Next Newsletter I will compile another newsletter when there is something to say, so if you have any experience, advice or ideas to share, let me know. And if anyone is looking for something to do, get in touch.				
Coordinator: Brian O'Shea				
TBG20/news3 14.07.1992				

are doing as individuals) - let me know if this is an incorrect assumption, but we shouldn't let processing the Mulanje specimens be the only thing happening in the TBG. Let me know about any matters you think we need

to discuss, or act on.

Newsletter 4 - September 1992

Eustace Jones (1909 - 1992)

Most of you will now have heard of the death of Eustace Jones, who died on 21st August. He had been ill for a number of months, but his death came as a surprise. Nine members of the TBG were among those who attended his funeral service at Kirtlington Parish Church on 1st September. Jeff Duckett gave an appreciation on behalf of the BBS. A full appreciation will appear elsewhere, but no-one will notice his absence more than those of us in the TBG who have always assumed that Eustace would sort our hepatics out for us. If we have to do this for ourselves, then this will stand as yet another tribute to the man who has perhaps done more than any other for African hepaticology.

He has left behind a substantial portion of a Hepatic Flora of West Africa, which was mentioned in the previous newsletter. We hope that the TBG can be active in seeing that document completed and prepared for publication.

TBG AGM

The AGM will take place on Saturday 26th September - probably after the BBS AGM, but dependant on the AGM's timing. At present nobody has offered anything for the agenda, but there are some issues raised in this newsletter that we need to discuss. In addition, we will attempt to meet earlier in the meeting (say on Friday night) to discuss the specifics of the Mulanje progress (and any other subject), to which everyone is invited. We will not be able to be specific about times until meal times, time of the Council meeting etc. are known.

Ecuador

In the last newsletter, we asked whether anyone was interested in receiving specimens from Ecuador. Theo Arts has written to say that he has now started looking at the flora of Ecuador, and collected almost 800 numbers on a trip there in July 1991. His first collections yielded several new records for south America, and he has now written to Dr Savage in Ecuador, hoping for fruitful co-operation. Theo would be interested to hear from any one else with an interest in the area.

Mt. Mulanje Expedition

Work continues on the collections, and specimens have now been sent to at least five 'experts' for identification. Progress will be reviewed at the BBS AGM on September 25th-27th. We have drawn up a list of responsibilities of expedition members for particular taxonomic groups, which has now been issued as a TBG document. It is enclosed with this mailing to give members an idea of where they might go for support for their own identification problems.

We hope to hold another workshop, to which all TBG members are invited.

Bryonet

Gillis Een has written proposing that we should maintain communications between members by using Bryonet, a bryological 'bulletin board' (BB). A BB is a computerised information centre that you use just like a noticeboard in an office or lab., but which can also be used interactively as a conference between people with similar interests. Most universities (including those in the tropics) are attached to communications networks that would allow access to Bryonet, but for individuals it would involve the cost of adding data communications facilities to their computer, and paying telephone charges for the period of connection to the service. The service has been advertised in the Bryological Times, but if anyone is interested get in touch with either me or Gillis, and I will report back with any information on progress.

Frontier - Tanzania

An organisation by this name has written asking whether the BBS can help in identifying specimens collected in Tanzania's coastal forests. Frontier is sponsored by the Society for Environmental Exploration, who appear to be London-based, and in conjunction with the University of Dar Es Salaam are carrying out a biological survey of Tanzania's coastal forests. I havre written back asking for more information on how many specimens are involved, their quality etc., and asked for a reply before the date of the AGM. This could be an interesting project for the TBG to become involved with - provided anyone has the time to spare. We are now in a much better position to be able to support each other on identification work.

Documents

Two new documents have been produced:

21 - Malawi responsibilities A list of all families known in Malawi, showing both the member of the expedition taking responsibility for that family, together with the expert who has agreed to help with identification. A copy of this list is attached.

___22 - Newsletter 4 (this newsletter)

Next Newsletter

The next newsletter will now be sometime after the AGM, but apart from reporting back on the AGM it would be nice to pass on some other news, so if you have any experience, advice or ideas to share, or you are looking for something to do, get in touch.

Brian O'Shea (Coordinator)

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Newsletter 5 - January 1993

Coordinator - Change of address

I have now changed address and phone number - details at end of Newsletter.

Eustace Jones's African Flora

All the papers of Eustace's west African hepatic flora are now at Edinburgh Botanical Garden, and Martin Wigginton is coordinating the effort to word process the document. Ten volunteers are doing the typing, but Martin would welcome more. The first batch of pages has been sent out, about 20 pages per person. Attempts were made to scan the document directly into the computer, but scanning, saving and editing an average page was estimated as 40 minutes - much more than the time to type it, even for two-finger typists. Brief instructions on formatting and standards are provided, and Martin will attempt to convert the various word processing formats to Word Perfect 5.1 for the final document.

TBG AGM

Several of the action points from the TBG AGM were concerned with the west African hepatic flora, and these are now in hand, and a request for help with the typing will appear in the next *BBS Bulletin*. The suggestion for a future trip to Madagascar is discussed below.

Mt. Mulanje Expedition

Identification Responsibilities A number of 'experts' have now been confirmed for our list of identification responsibilities for the Malawi specimens, and now we also have cover for Racopilaceae (B.O. van Zanten) and Sematophyllaceae (Ben Tan).

Publications The first two papers - the introductory paper and checklist - are now completed, and the checklist has already been sent to Jeff Bates, the *Journal of Bryology* editor. The introductory paper has circulated for comment and was reviewed by all present at the workshop (see below). It should be ready for submission by the end of January. It is likely that the third paper will be on *Sphagnum* as all specimens have now been identified. Other early papers are likely to be on Polytrichaceae, *Fissidens, Campylopus*, and other taxa or groups that are easy to recognise.

Workshop A workshop was held on 16/17 January at Reading University to progress the Malawi collections. 8 people attended: Nick Hodgetts, Royce Longton, Zac Magombo, Peter Martin, Brian O'Shea, Ron Porley, Robin Stevenson and Martin Wigginton. Zac is in Britain taking an MSc course at R.B.G., Edinburgh, and this was his first opportunity to look at his Mount Mulanje specimens.

The weekend was spent in reviewing Royce Longton's introductory paper on the expedition, and then standardising the use of locality names across all packets. We also had a quick look through all the so-far unexamined specimens - those of Edwin Kathumba, Liz Kungu and Zac. Preliminary identifications were given to all specimens (even if only 'hepatic' or 'pleurocarp'), and all specimens

of *Fissidens*, *Campylopus*, *Sphagnum*, *Leucoloma/Dicranoloma*, Polytrichaceae, Thuidiaceae and Mniaceae were extracted. In addition, specimens of these families/genera were extracted by individuals from their own collections. The refereeing of these will now be coordinated by the expedition member responsible.

Future expeditions of the BBS TBG

It has been suggested that we should arrange a trip to Madagascar for 1994. This suggestion originated from a comment by Dries Touw (Leiden) that even in supposedly well known places like Madagascar, it was easy to pick up new and surprising plants. As Jeff Duckett suggested, a joint expedition from Leiden and Reading might attract EEC sponsorship, and we now have provisional agreement that this might be possible, and the idea is being actively pursued.

Documents

Two new documents have been produced:

23 - Annual General Meeting (2) (26.09.92) (Copy enclosed)

24 - Newsletter 5 (this newsletter)

There have also been changes to document 21 (Malawi taxonomic responsibilities) and to the Membership List (document 9). The latter changes were the addition of Ben Tan to the list, and changes to the addresses of Brian O'Shea, Angela Newton and Martin Wigginton.

Shaba Flora

David Long recently identified the fact that Vanden Berghen's 1972 hepatic flora of Shaba (southern Zaire) is still available for sale (for just under £30, including postage and packing). The book is an excellent flora and covers most tropical African taxa. The details are as follows:

Vanden Berghen, C. 1972. Hépatiques et Anthocérotées. *Hydrobiological Survey of the Lake Bangwelu-Luapula River Basin. Vol VIII, fasc. 1*

You will need to send 1450 Belgian Francs (which includes postage to UK) to:

Cercle Hydrobiologique de Bruxelles, Building "Régence 1" Avenue de la Houlette 76 boîte 29, B-1160 Bruxelles, Belgium.

Bryologia Africana

In a recent letter from Bob Magill, he suggested that *Bryologia Africana* would not make much progress in the next couple of years because of his own commitments, and the limited response from contributors. As a result attempts are being made to produce an interim list of African mosses (see below).

His own South African flora has also been stalled recently because of lack of funding from the publishers, but he

now expects the third volume to appear during 1993. He will continue to let the TBG have copies of new treatments for this flora as they are produced.

List of African Mosses

Because of the delay to *Bryologia Africana*, it was thought a useful exercise to have a list of African mosses, based on current literature references, to give some assistance to those trying to identify African mosses. I have already started work on this. Most of Africa has been covered by checklists although some of these are now rather old, and these are all being entered into a database, to be updated with later publications. The list will be based on the publications listed below, which cover all of Africa apart from Egypt, Sudan and (probably) Djibouti. The Born & Frahm reference replaces Demaret's of 1940 and 1946 covering exactly the same area. I would be grateful for pointers to later publications, or monographs that include African taxa. I have for instance already included Frahm's *Campylopus* update, Eddy's on *Sphagnum*, Hyvönen's on *Pogonatum* and Edwards's on west African Calymperaceae. I expect this to take some time because of the volume of data involved, but the resulting list and (dBase) database will be available to anyone requiring it, via the IAB Software Library.

Best, E.B. (1990). The Bryophytes of Zimbabwe - an annotated check-list. *Kirkia* **13(2)**:293-318.

Born, S. & Frahm, J.-P. (1993). A new checklist of the mosses of Central Africa. (in press).

Crosby, M.R. & Schultze-Motel, U. & W. (1983). Katalog der Laubmoose von Madagaskar und dem umliegenden Inseln. *Willdenowia* **13**:187-255.

Cufodontis, G. (1951). Vorläufige Aufzählunf der Laubmoose Äthiopiens. Öst. Bot. Z. 98:217-244.

Frahm, J.-P. (1984). Ergänzungen zur Laubmoosflora der Elfenbeinküste. *Cryptogamie, Bryol. Lichénol.* **5(3)**:281-283.

Jelenc, F. (1955). Muscinées de l'Afrique du Nord (Algérie, Tunisie, Maroc, Sahara). *Extrait du Bull. Soc. Géor. Archéol. Oran.* **72-76**:1-152.

Jelenc, F. (1967). Muscinées de l'Afrique du Nord. (Supplément). Rev. Bryol. Lichénol. 36:186-215.

Kis, G. (1985). *Mosses of South-East Tropical Africa. An annotated list with distributional data.* Institute of Ecology and Botany of the Hungarian Academy of Sciences, Vácrátót, Hungary.

Magill, R. (1981). *Bryophyta. Part 1. Mosses. Fasc. I. Sphagnaceae - Grimmiaceae* in: Flora of Southern Africa ed. O.A. Leistner, Republic of South Africa.

Magill, R. (1987). *Bryophyta. Part 1. Mosses. Fasc. II. Gigaspermaceae - Bartramiaceae* in: Flora of Southern Africa ed. O.A. Leistner, Republic of South Africa.

Magill, R. and Schelpe, E.A. (1979). The bryophytes of Southern Africa, an annotated checklist. *Mem. Bot. Surv. S. Afr.* **43**:1-39.

O'Shea, B.J. (1993). British Bryological Society Expedition to Mount Mulanje, Malawi. II - Checklist of Malawi Bryophytes. (in press).

Phiri, P.S.M. & Ochyra, R. (1985). A preliminary account of the mosses of Zambia. J. Bryol. 15:177-197.

Schultze-Motel, W. (1975). Katalog der Laubmoose von West-Afrika. Willdenowia 7:473-535.

Schultze-Motel, W. (1979). Die Laubmoose von Togo, West-Africa. Lindbergia 5:89-92.

Next Newsletter

The next newsletter will be published when there's something to say, so if you have any experience, advice or ideas to share, or you are looking for something to do, get in touch.

Coordinator: Brian O'Shea

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Newsletter 6 - July 1993

Eustace Jones's West African Flora

Martin Wigginton reports good progress on the typing of Eustace's West African flora. So far 15 people have been involved with the typing: Sean Edwards, Richard Fisk, Nick Hodgetts, David Long, Royce Longton, Peter Martin, Brian O'Shea, Roy Perry, Liz Pickles, Michael Proctor, Keith Raistrick, Tony Smith, Robin Stevenson, Mike Walton and Martin Wigginton. About 90% is now complete, and Martin has been editing it all together in Microsoft Word for Windows. The job of scientific editing (and hopefully the production of illustrations) can then begin under the control of David Long. Rob Gradstein has offered to help with this. Many thanks to all those who have helped so far.

Mulanje Mt. Expedition

Identification Responsibilities Each bryophyte family has now been allocated to an expedition member, who will be responsible for co-ordinating the identification of all collections for the family, via an expert. Not all families have yet got experts who have agreed to help, but it will be part of the family co-ordinators job to either find an expert, or to do the job themselves.

Quite a number of the collections so far sent for identification were sent for the naming of one species within a mixed collection - i.e. before being sorted into individual taxa - particularly those of the non-UK-based expedition members. This means that quite a bit of work is still necessary before packets can be distributed to sponsors and other recipients. In addition it means that the number of specimens sent for identification are in many cases only part of a collection, and thus it is difficult to relate the number sent with the 4500 collections made on the expedition. On average there will be at least two species per collection - probably more.

The following numbers of collections have now been sent for identification:

	Sent	Returned
Andreaeaceae	30	30
Asterella	?	?
Brachytheciaceae	1	1
Calymperaceae	21	21
Campylopus	259	117
Fissidentaceae	153	
Grimmiaceae	6	6

Leucoloma/Dicranoloma 15

Polytrichaceae ?

Sphagnaceae ? ?

Thuidiaceae 45 45

Total 530 220

When material is returned identified to a co-ordinator, it is then returned to the collector (to combine with extra material from the same collection), and then returned by the collector as an identified specimen for distribution to Royce Longton at Reading.

We are extremely grateful for the efforts provided by the 'experts' who are identifying large numbers of specimens in very short periods of time.

Publications The first two papers - the introductory paper and checklist - are now completed, and should appear in the next *Journal of Bryology*. A start has not yet been made on any other papers, but most of the *Sphagnum* and Thuidiaceae has probably now been identified, and so there should be some progress on these shortly.

In addition, arising out of the need to have a shortlist of taxa to be considered when identifying the Mulanje bryophytes, checklists of the hepatics and mosses for tropical Africa are being produced. Martin Wigginton has completed a checklist of the hepatics of Africa south of the Sahara, which has already been made available to TBG members, but which has now been revised for wider publication. I am also progressing a list of the mosses of Africa (see last newsletter) and progress on this is described below.

I am now maintaining a list of new taxa added to the Malawi Checklist, together with associated lists of deleted taxa and synonym changes/additions. I have so far got 14 additions, but I think there are at least six more I don't yet have on the list.

Workshop Another workshop has now been arranged for the weekend of 7-8 August in the Botany Department of Reading University, organised by Royce Longton. Anyone interested in attending should consult Royce, who can arrange overnight accommodation. The programme is likely to be very informal, but we would expect to review where we have got to, divide collections into individual taxa, continue with identifications etc.

Future expeditions of the BBS TBG

Little progress has been made on organising a BBS TBG trip to Madagascar, but a number of people have expressed great interest in participating in such a trip.

Bryologia Africana

Bob Magill has now written with positive news about progress on Bryologia Africana. He is now able to give the project much higher priority, and is seeking assistance from the TBG in soliciting contributions. So far the number of volunteers has been quite low, so if anyone would like to volunteer, Bob will send you a copy of the guide for contributors. [He also reports that volume 3 of his Southern African moss flora is still progressing and he has now seen the first set of illustrations.]

Tropical Bryology

Volume 7 of Tropical Bryology is now complete and has gone to the printers (and for the first time includes a number of papers on lichens). Volume 8 is now being prepared and will contain the report of the BRYTROP expedition to Central Africa last year, and includes a new Checklist of the Mosses of Central Africa. An innovation from Vol. 7 will be the availability of the disk version of the journal in a Microsoft Windows presentation.

Exsiccata

Bryophyta Africana Selecta, a new series of exsiccati distributed by Ryszard Ochyra and Tamás Pócs, is now available for sale. 100 numbers per year will be published, in four fascicles, with a cost of \$200 per annum. The first hundred were issued in 1992.

Documents

One new document has been produced:

____25 - Newsletter 6 (this newsletter)

There have also been changes to document 9 (the Membership List). The following names have been added to the list: Bob Magill, Lars Hedenäs, Lars Söderström, Patxi Heras and Jeff Bates. Sadly, I must also report the death of Peter Wanstall earlier this year. He had a long interest in African bryophytes, including producing publications. His presence in the BBS will be missed.

List of African Mosses

Good progress is being made with the list of African mosses. I have concentrated first on tropical taxa and expect to finish this during July. I have done west and east Africa and I am currently covering central Africa, with just Ethiopia and Madagascar to go. So far I have listed about 2200 taxa. Gillis Een has offered his list (on computer disk) for Afr.3 (Madagascar and Indian Ocean Islands) which will be of great help. I have already been able to produce individual country listings for people 'at the touch of a button' from the database. It is clear that there are a lot of incorrect names in the list (i.e. names that should be changed or synonymised) and it is also clear which genera may be in need of revision (long lists of names, each occurring in only one country).

Next Newsletter

The next newsletter will be published when there's something to say, so if you have any experience, advice or ideas to share, or you are looking for something to do, get in touch.

Coordinator: Brian O'Shea

Published by: British Bryological Society Tropical Bryology Group

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Newsletter 7 - January 1994

BBS TBG AGM, 1993

The BBS TBG Annual General Meeting took place on 18 September 1993 at York, following the BBS AGM. The notes of this meeting will be distributed with this newsletter.

Eustace Jones's West African Flora

The whole text of Eustace Jones' flora has now been converted to a word processing file using Word for Windows, under the auspices of Martin Wigginton, and forms 235 pages of text. The BBS TBG AGM agreed that the flora should be illustrated, and Martin has confirmed that about 90% of the text can be illustrated by drawings already published by Eustace. The job of scientific editing (and hopefully the production of any missing illustrations) can then begin under the control of David Long and Martin. Copies are being sent to Rob Gradstein and Tamás Pócs for refereeing, and estimates of production costs are being sought. Several publication possibilities are being pursued, and offers have been made. Many thanks to all those who have helped so far.

Hepatic List for Sub-Saharan Africa

Martin Wiggintom's list of hepatics may now be developed further with the assistance of Tamás Pócs and his students, and Martin is hoping to visiit Tamás in Hungary to pursue this. Dr. Grolle also has a list of the hepatics of the African islands that is in a fairly advanced state of production.

Mulanje Mt. Expedition

Identification The job of identifying and writing up the collections continues, and although progress remains on the whole rather slow, significant inroads have been made, and much of it recently. The table below summarises the mosses:

Mosses	Sent	t Ident.	Taxa	New
Andreaeaceae	30	30	4	4
Brachytheciaceae	12	10	5	5
Bryaceae	5	5	2	0
Calymperaceae	45	41	6	3
Campylopus	285	221	21	12

Total	674	481	56	34
Thuidiaceae	55	45	5	1
Splachnaceae	4			
Sphagnaceae	30			
Racopilaceae	15			
Pterobryaceae	1	1	1	1
Leucoloma/ Dicranoloma	15			
Lembophyllaceae	7	7	1	0
Grimmiaceae	6	6	2	2
Fissidentaceae	158	115	9	6
Erpodiaceae	6			

34 of the 56 taxa so far identified are new to the known flora of Malawi.

In addition over 40 hepatics have been found as new to the known flora of Malawi, many resulting from Martin Wigginton's work on the epiphylls. Drs. Grolle (miscellaneous), Pócs (*Colura*, Cololejeunea, *Adelanthus*) and Vána (Cephaloziaceae, Cephaloziellaceae, Jungermanniaceae) and David Long (Aytoniaceae) have all identified or confirmed hepatics. A fuller statement of progress in hepatics will appear in a later newsletter.

All identified collections are sent to Royce Longton at Reading for onward distribution, where all collections are now transferred to the new computer system.

As we still have many mixed collections that need sorting into the constituent taxa, any volunteers to do this work would be welcome. Most of these collections are held at Reading, but could be made available elsewhere. Even separating into acrocarpous and pleurocarpous mosses, leafy and thallose hepatics would help.

We are extremely grateful for the efforts provided by the 'experts' who are identifying large numbers of specimens in very short periods of time.

Publications The first two papers - the introductory paper and checklist - have appeared in *Journal of Bryology* **17(4)**. It is hoped that taxonomic papers will now follow - although it may be another year before the first appears in print.

Workshop Another workshop was held on the weekend of 7-8 August in the Botany Department of Reading University, organised by Royce Longton. Apart from Royce, Ron Porley, Nick Hodgetts and Brian O'Shea attended. A final check was made on the introductory paper for the *J. Bryol.*, and further progress was made on processing collections.

New Member

Herman Stieperaere (Nationale Plantentuin van België, Domein van Bouchout, B-1860, MEISE, Belgium.) has now joined the group, and hopes to be visiting Burundi on a collecting expedition this year.

Future expeditions of the BBS TBG

Little progress has been made on organising a BBS TBG trip to Madagascar, but a number of people have expressed great interest in participating in such a trip.

Bryologia Africana

No further news on this, but contact Bob Magill at Missouri Botanical Garden if you are interested in contributing.

Tropical Bryology

Volumes 7 and 8 of *Tropical Bryology* are now published, and the latter volume contains most of the findings of the BRYOTROP expedition to Central Africa in 1991, and includes keys and brief descriptions of the taxa found. This provides an excellent overall view, and many of the keys cover other taxa found in the area. This will be of tremendous value to anyone working on tropical African bryophytes. Volume 9 (now in production) will contain further taxonomic results of the expedition. Subscriptions are available from Jan-Peter Frahm.

Other Publications

There seems to have been a bit of a lull in publications from *Flora Neotropica*, although several papers seem to be with them for publication. The new *Mosses of Mexico* book has also been delayed, but should be out round about now.

Documents

The following new documents have been produced:

26 - AGM minutes (1	.8/9/93)
27 - Key to Tropical	
28 - Key to Tropical	
29 - Key to Tropical	•
30 - Newsletter 7 (th	

Number 26 is included with this Newsletter. Numbers 27 to 29 are translations by Robin Stevenson of the papers by De Sloover (27 & 28) and Vanden Berghen (29). There have also been changes to document 9 (list of members), 11 (the list of documents), and to 13 (Checklist of Malawi Bryophytes).

List of Tropical African Mosses

What was previously a list of all African mosses is now confined to tropical taxa, but pressures of other work have inhibited my progress on the list recently. All of mainland Africa is now on file, and numbers 2500 taxa. Madagascar is still to do. I have again been able to produce individual country listings for people 'at the touch of a button' from the database, with related literature references. There is an awful lot of work still to do in checking names, and some areas (e.g. *Fissidens*) are changing frequently as revisions are produced, and the new BRYOTROP publications (see *Tropical Bryology* above) are producing a new crop of changes.

In December's *Australasian Bryological Newsletter*, Rod Seppelt gave an account of the IAB workshop on 'Bryofloras of the world - current projects' at the recent Tokyo Botanical Congress. I was interested to read that America N. of Mexico has c. 1250 mosses (+700 hepatics), Japan 1183, Australia 530 (+500 hepatics), and China 2500. Europe for comparison has c.1225 (+450 hepatics). It does appear that the tropical African flora is something of a challenge, with (like China) something like 20-25% of the world's species. Unfortunately moss names outnumber mosses by 8.5 to 1 (according to Marshall Crosby's estimates), or about 3:1 just considering basionyms. That means I may still have to discover a very large number of redundant names and synonyms!

Frontier Tanzania

You may remember some time ago we received a request from Frontier Tanzania to look at mosses from Tanzanian coastal forests. I received no response to either of my letters asking for more information, but following a phone call I have received a reply saying that Tamás Pócs is now identifying their material for them. I have replied asking them to contact us again if they need any further help.

East African Biodiversity

There is a project called 'Availability of Biodiversity Information for East Africa' run by IUCN, World Conservation Monitoring Centre and various national institutions in Kenya, Tanzania and Uganda, which has written to the BBS asking whether we have any information to contribute. I provided information for the BBS reply on the Malawi collections, together with the list of tropical African mosses.

IAB Committee on Tropical Bryology

I have been invited to become a member of the International Association of Bryologists' Committee on Tropical Bryology. This is organised by Ben Tan, and the other members are Tamás Pócs and Ines Sastra-De Jesús. This is an opportunity for the TBG to contribute to the IAB strategy and activities - and perhaps also an opportunity to re-examine where we are going ourselves.

DoE Darwin Initiative

The Department of the Environment 'Darwin Initiative' invites applications from British institutions, organisations or individuals for grants to fund a variety of different sorts of projects. These include "collaborative projects in countries poor in resources but rich in biodiversity, including training in taxonomic and other techniques",

"scientists working in the biodiversity field in need of support" and "research projects covering neglected or undervalued aspects of work on biodiversity and particularly carried out in cooperation with local people". Thanks to Chris Preston for mentioning this to me. This looks a possible way for funding for some of the work we would like to do. The booklet (dated July 1993) with application forms is available from DoE.

Next Newsletter

The next newsletter will be published when there's something to say, so if you have any experience, advice or ideas to share, or you are looking for something to do, get in touch.

Coordinator: Brian O'Shea

Please note: from 25 March I take early retirement from work, and although I still expect to be doing some part time work, my work phone and fax numbers will change, probably from mid-February.

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Newsletter 8 - September 1994

I must apologise for the long delay since the last newsletter, and the nearness of the distribution of this one to the TBG AGM. I hope you all get it in time. I must thank those who helped with the copying and distribution now that I don't have access to such facilities myself.

BBS TBG AGM, 1994

The 1994 AGM of the TBG will take place after the BBS AGM on 24 September 1994. Topics for discussions will include:

- * progress on Eustace Jones' West African hepatic flora
- * future expeditions
- * election of executive (currently Brian O'Shea, Alan Harrington, David Long, Royce Longton, Robin Stevenson)
- * future plans
- * any other business

Let me know if you wish anything else to be raised.

International Association of Bryologists Conference - Tropical Bryophytes: Biology, Diversity and Conservation

This meeting will take place from August 7-12, 1995 in Mexico City. There will be a workshop on endangered species, a day of contributed papers, and two fieldtrips, one of one day, one of two days. I hope to attend, as do other TBG members. The scientific programme (organised by Tomas Hallingbäck from Uppsala, Sweden) is not yet fixed.

Eustace Jones's West African Flora

David Long has agreed to be responsible for the text of the flora, and Martin Wigginton the illustrations. Detailed comment has now been received back from Rob Gradstein and Tamás Pócs, indicating that there are a number of taxa missing and that some areas need updating. The indications are that it may take at least a year to do the necessary work on the text. Martin has received all the permissions he has so far requested for publishing the illustrations, and although all the drawings won't be in the same style, most are now covered. Nevertheless, there will still be some that will need redrawing. David and Martin will be able to provide an update at the AGM.

News of members

Tamás Pócs has recently been in Réunion, and is now in Madagascar.

Patxi Heras and **Marta Infanta** visited BM for two weeks in August, following their recent collecting trip to Rio Muni (the mainland part of Equatorial Guinea). They collected a large number of mosses and liverworts new to Rio Muni, one of the less well-known areas of Africa.

Mulanje Mt. Expedition

Identification Good progress is being made, but the task seems never-ending - just as you think you have got most collections for a group identified, another dozen arrives - and then another dozen. However, writing up has already started for some groups, and later identifications should be able to slot in quite easily. A sample/pro-forma paper has been produced as guidance to authors. The tables below shows the volume dealt with:

Mosses	Sent	Ident.	Taxa	New
Andreaeaceae	28	28	4	4
Bartramiaceae	89			
Brachytheciaceae	12	12	6	5
Bryaceae	5	5	2	0
Calymperaceae	89	45	8	4
Campylopus	313	306	25	13
Cryphaeaceae	4			
Erpodiaceae	6	6	3	3
Fissidentaceae	183	128	9	6
Funariaceae	13			
Grimmiaceae	6	6	2	2
Hedwigiaceae	46			
Hookeriaceae	58			
Hypopterygiaceae	37			
Leucodontaceae	12			
Leucoloma/ Dicranoloma	15			
Meteoriaceae	130	130	8	1

Neckeraceae	79	79	5	4
Orthotrichaceae	47	2	1	0
Polytrichaceae	65			
Pottiaceae	51	51	8	4
Pterobryaceae	7	1	1	1
Racopilaceae	15			
Regmatodontaceae	3			
Rhizogoniaceae	3			
Rigodiaceae	7	7	1	0
Sematophyllaceae	109			
Sphagnaceae	80			
Splachnaceae	6	6	1	0
Thuidiaceae	62	62	7	1
Thuidiaceae Trachypodaceae	62 12	62	7	1
		62 874	7 91	1 48
	12			
Trachypodaceae	12 Total 1592	874	91	48
Trachypodaceae Liverworts	12 Total 1592 Sent	874 Ident.	91 Taxa	48 New
Trachypodaceae Liverworts Adelanthaceae	12 Total 1592 Sent 4	874 Ident. 4	91 Taxa 2	48 New 1
Trachypodaceae Liverworts Adelanthaceae Aneuraceae	12 Total 1592 Sent 4 16	874 Ident. 4	91 Taxa 2	48 New 1
Trachypodaceae Liverworts Adelanthaceae Aneuraceae Anthocerotaceae	12 Total 1592 Sent 4 16 10	874 Ident. 4	91 Taxa 2 1	48 New 1
Trachypodaceae Liverworts Adelanthaceae Aneuraceae Anthocerotaceae Arnelliaceae	12 Total 1592 Sent 4 16 10 7	874 Ident. 4 1	91 Taxa 2 1	48 New 1 1
Trachypodaceae Liverworts Adelanthaceae Aneuraceae Anthocerotaceae Arnelliaceae Acrobolbaceae	12 Total 1592 Sent 4 16 10 7 6	874 Ident. 4 1 7 6	91 Taxa 2 1	48 New 1 1 2
Liverworts Adelanthaceae Aneuraceae Anthocerotaceae Arnelliaceae Acrobolbaceae Allisoniaceae	12 Total 1592 Sent 4 16 10 7 6 1	874 Ident. 4 1 7 6 1	91 Taxa 2 1	48 New 1 1 2 0

	Grand Tota	l 2360	1360	212	118
	Tota	l 768	486	121	70
Wiesnerellaceae		?	?	1	0
Ricciaceae		1	1	1	1
Radulaceae		57	57	9	6
Porellaceae		8	8	2	2
Plagiochilaceae		68	68	9	6
Marchantiaceae		3			
Lepidoziaceae		28	28	3	1
Lejeuneaceae		221	113	48	28
Jungermanniaceae		124	52	11	7
Herbertaceae		28			
Gymnomitriaceae		2	2	1	1
Geocalycaceae		67	27	9	2
Frullaniaceae		85	85	10	4

56% (118/212) of taxa so far identified are new to the known flora of Malawi.

The procedure we are following for processing the collections is that all bryophyte families have coordinators within the expedition team, and that collectors send their collections to the coordinators, who then organise the identification (either by sending to an expert or doing it themselves). The identified specimens are then returned to the collector, who in turn sends them to Royce Longton at Reading for onward distribution. Reading maintains details of all processed collections on their computer, but four of us are using the TAXA computer system to support the identification process for our own collections and those we coordinate for others. It becomes extremely difficult to manage several hundred specimens, and to know where they all are, without computer support, and TAXA continues to be developed as new facilities are needed.

We are also including packets collected by Robin Stevenson in Malawi, and a further collection of 50 or so from Brussels. These have been distributed amongst the coordinators.

Publications It is not thought that the November 1994 cut-off will be achieved for any papers, but there are hopes that July 1995 should see some with Jeff Bates for the *Journal of Bryology*. In particular, *Sphagnum* is being worked on by Alan Eddy, and I am producing a first draft for *Campylopus*, for a joint paper with Jan-Peter Frahm. It is also hoped that Meteoriaceae and possibly Pterobryaceae will be got under way by Vicky Bronham, a Reading student Royce Longton has been able to employ over the summer. Our experts for both Thuidiaceae and Fissidentaceae are also keen to get a publication completed. Lack of time and other commitments are the

main inhibitors for all concerned.

Workshop Another workshop was held on the weekend of 9-10 July in the Botany Department of Reading University, organised by Royce Longton. Royce, Ron Porley, Liz Kungu, Martin Wigginton and Brian O'Shea attended. We were able to sort through most of the remaining material at Reading, and this has now been distributed to the appropriate coordinators. Unfortunately this means, in my case, another 600+ unsorted packets to process, and I haven't finished the last lot yet!

New Members/Change of address

Howard Matcham has now joined the group, and visited Lesotho (not guite tropical) in April with Jeff Duckett.

Terry Hedderson, recently arrived at Reading University Botany Department, has also joined.

Jan-Peter Frahm has now moved to Bonn University (Botanisches Institut der Universität, Meckenheimer Allee 170, D-53115 Bonn, Germany).

Future expeditions of the BBS TBG

The idea of a BBS TBG trip to Madagascar has not been progressed because of concern over the number of people already collecting there, and the uncertain political situation, and it has been suggested that there are other very promising areas of Africa that are still underworked. As a result, Nick Hodgetts is now pursuing the possibility of a trip to the Ruwenzoris in Uganda. He will be able to report on progress at the AGM. I realise many people were interested specifically in Madagascar, but if we were to arrange a trip to Uganda in 1996 (1995 is too soon), could you please let me know urgently before or at the AGM, so we get some feel for the level of interest? If you can't reply by then, don't worry - it's just that it would help Nick if we had some idea of the level of interest. We would be seeking funding, possibly via the Darwin Initiative, but participants must expect to have to make a contribution themselves. This amounted to around £700 for the Malawi trip.

Bryologia Africana

No further news, but I know that some people are already actively revising groups for this flora. Contact Bob Magill at Missouri Botanical Garden if you are interested in contributing yourself, and Tamás Pócs if your interest is in hepatics.

Tropical Bryology

Volume 8 of *Tropical Bryology* contained most of the findings of the BRYOTROP expedition to Central Africa in 1991, and included keys and brief descriptions of the taxa found. This provides an excellent overall view, and many of the keys cover other taxa found in the area. This will be of tremendous value to anyone working on tropical African bryophytes. Volume 9 (published at the beginning of this month) contains further taxonomic and scientific results of the expedition, as well as a good variety of other material. Subscriptions are available from Jan-Peter Frahm.

Other Publications

Flora Neotropica. Lejeuneaceae: Ptychantheae, Brachiolejeuneae (Rob Gradstein) and Stereophyllaceae (Ireland and Buck) have now been published. These supplement:

Plagiotheciaceae;
Dicranaceae: Campylopodioideae & Paraleucobryoideae;
Calymperacaeae and Leucophanaceae

which have already been published. If you want to subscribe to this series, contact Scientific Publications Department, New York Botanical Garden, Bronx, New York 10458-5126, USA. With the 10% reduction for subscribing to the series, the cost including postage for the two latest volumes is \$32.48 (Lejeuneaceae) and \$16.21 (Stereophyllaceae).

Mosses of Mexico has been published as a handsome and useful 2 volume set, having good descriptons and illustrations of many of the African mosses. I am not sure of the current list price, but it isn't particularly cheap. Contact NYBG Scientific Publications Department at the address shown above.

Moss Flora of Central America, Part 1. Sphagnaceae-Calymperaceae. This new book from Missouri Botanical Garden is largely written by Bruce Allen, with contributions from four other experts, and is the first of four volumes. The genus and species descriptions are quite short, emphasising critical features. There are no illustrations, but existing illustrations are referred to for each taxon. There are distribution maps for all species. The keys look to be very useful, as do the descriptions emphasising critical characters. The book is only \$23 including postage from Department Eleven, Missouri Botanical Garden, PO Box 299, St Louis, MO 63166-0299, USA. They have a number of other books of interest on sale also, including the reprint of Mitten's Musci Austroamericani for \$5.50 plus postage.

Genera of Pottiaceae by Richard Zander. Although of much more general interest than the above books, this excellently produced volume contains keys and descriptions for all genera of the Pottiaceae, together will illustrations of many taxa, and a list of all currently recognised species and subspecies of the family. It is available for about \$50 from Publication Sales Division, Buffalo Museum of Science, 1020 Humboldt Parkway, Buffalo, NY 14211-1293, USA.

Documents

The following new documents have been produced:

____31 - Newsletter 8 (this newsletter)

There have also been changes to document 9 (list of members), 11 (the list of documents), and to 21 (Malawi expedition taxonomic responsibilities).

Hepatic List for Sub-Saharan Africa

Martin Wigginton's list of hepatics has been further developed following his visit to Hungary, and although historical data is still being added, he believes it is now more or less complete, and should be published during next year.

Moss List of Sub-Saharan Africa

The tedium of typing in long lists of taxon names has meant that the production of this list has taken longer than expected. Similarly, the large number of known synonyms that appear in the list take some discovering, and the list of references indicate the large number of publications which have supplemented the basic list of literature that was published in Newsletter 5. I have completed all of tropical Africa apart from those areas in the Flora of Southern Africa region (i.e. Namibia, Botswana and the northern part of South Africa), and will bring a copy of the list to the September AGM. There still remains a great deal of checking to make sure that all data is correctly on file, and that all revisions have been incorporated. One of the major genera requiring revision is *Fissidens*, and I hope that will be ready later this year from Dr. Bruggeman-Nannenga, and some scores of names may disappear. At present there are just under 3000 names on the list, and a have a list of over 600 synonyms that have been applied. I hope to present some statistics at the AGM meeting about the rate of improvement in our knowledge of the flora. I expect to publish the list during 1995. As all the data is on the TAXA database, frequent updates can be made, and subsequent versions will probably be published electronically.

IAB Committee on Tropical Bryology

There has been some discussion on determining the aims and objectives of this committee, but it is likely that will be a slow start to any new activities. The members of the committee (from USA, Puerto Rico, Hungary and England) may be able to meet at next year's IAB meeting in Mexico.

Next Newsletter

The next newsletter will be published when there's something to say, so if you have any experience, advice or ideas to share, or you are looking for something to do, get in touch.

Coordinator: Brian O'Shea.

Please note: I can now only be contacted on my home phone number (071-738 7463). I can send and receive faxes on the same number, but only by manually switching between phone and fax - so you have to phone me to tell me if you want to send a fax!

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TBG Newsletter 9 - May 1995

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BBS TBG successful in bid for Darwin Initiative funding!

It is far too long (8 months!) since a TBG Newsletter was distributed, but at least I can issue it now with some important news: we have been successful in our application for funding from the UK Government's Darwin Initiative, for three expeditions to Uganda.

At one stage it had been proposed that the TBG should arrange an expedition to Madagascar, but deteriorating conditions in the country suggested this was not the right time (although conditions have apparently improved recently). It had also been proposed that the TBG should consider returning to Malawi, and should apply for funding to the Darwin Initiative for this. As the date for submissions drew near, it had not been confirmed that cooperation from Malawi would be forthcoming, so Nick Hodgetts and Martin Wigginton put together a hurried alternative application for 3 visits to Uganda, with the cooperation of Dr S.M. Byarujali of Makerere University. This was one of only 33 chosen from 214 applications - a credit to the quality of the application (as well as its relative cheapness!). 'The Darwin Initiative for the Survival of Species' is part of the UK Government's response to the Earth Summit at Rio, with the objective of supporting the aims of the Biodiversity Convention by deploying Britain's scientific, educational and technical strengths to assist the conservation and sustainable use of the world's species of plants and animals.

Our project is described in the application as follows:

The Afromontane Region is one of the richest areas in the world for bryophytes but, whilst Mt. Kilimanjaro and a few other mountains have been well explored, many other montane regions, including those in south-western Uganda, are poorly known bryologically. Bryophytes are vital to the ecology of tropical forests. They are particularly important in water retention, absorbing large volumes of water and releasing it gradually to the environment. They are also valuable as a habitat for a wide range of invertebrates. Bryophytes are an important but neglected component of forest biodiversity in their own right. Britain has a long history of expertise in bryology and the BBS has gained experience in East Africa that it would be useful to communicate to African botanists. Training of Ugandan botanists

would be an integral part of the project.

The main objectives were given as:

- to make as complete an inventory as possible of the bryophytes of the forest belt of the Ugandan Ruwenzori Mountains, Mgahinga Forest and Bwindi-Impenetrable Forest.
- to compare the bryophyte floras of these three areas, both with each other and with other East African mountains, in order to put them in context.
- to highlight the biodiversity of the study areas and identify the centres of bryological diversity, as a contribution to their effective conservation.
- to communicate the bryological importance of the study areas to Ugandan botanists and authorities.
- to train botanists from Makerere University in field bryology in order to initiate a centre of expertise and study for bryophytes in tropical Africa.

The proposed programme for the three years is as follows:

- May-Dec 1995: Preparatory work for first expedition, including obtaining permits, arranging accommodation, transport etc., and working out itinerary and division of responsibility; formalising arrangements with Makerere University and sending existing relevant literature to Ugandan botanists; working out format of papers resulting from project.
- Jan 1996: Expedition to Bwindi-Impenetrable Forest. Objective: to make an inventory of the bryophytes of the study area and to initiate field training for 2-3 Ugandan botanists and conservation staff.
- Feb-Dec 1996: Collating and identifying specimens; preparatory work for second expedition (as above). Working with Ugandan botanists by supplying them with further literature and identifying specimens as required; sending specimens to Makerere University as identified.
- Jan 1997: Expedition to Mgahinga Forest (subject to political stability).

 Objective: To make an inventory of the bryophytes of the study area and to continue field training for Ugandan botanists and conservation staff.
- Feb-Dec 1997: Collating and identifying specimens; preparatory work for third expedition (as above). Working with Ugandan botanists by supplying them with further literature and identifying specimens as required; sending specimens to Makerere University as identified. Writing up papers as appropriate (e.g. of any new species discovered).
- Jan-Feb 1998: Expedition to forest belt of Ruwenzori Mountains.
- March 1998-Dec 1999: Collating and identifying specimens; working with Ugandan botanists by supplying them with further literature and identifying specimens as required; sending specimens to Makerere University as identified; writing up findings of project. [Much of the work towards the writing up will already have been done after the first two expeditions.] Output will consist of taxonomic papers and papers relating to the biogeography, ecology and conservation of the bryophytes of the study areas.

Nick and Martin are obviously to be congratulated on making such a persuasive application at such short notice.

Participation. *Nick now needs to hear fairly urgently from anyone who is interested in participating in these expeditions, particularly the first one*, which is only 7 months away. The grant of £45000 over three years means that individual financial contributions should not be required. Several people expressed an interest in a trip to Madagascar, but with the change of destination it is best if individuals re-affirm their interest (or state it for the first time) to *Nick Hodgetts, at JNCC, Monkstone House, City Road, Peterborough PE1 1JY, UK, telephone 01733 866805, fax 01733 555948 (+44 1733... from abroad.)*

This will also mean that more people will be needed to help with identification work after the expedition. Please

consider this, even if you have no previous experience. We can probably provide literature and reference material to help. Contact me if you are interested.

BBS TBG AGM 24 September 1994

Those attending: Alan Crundwell, Sean Edwards, Len Ellis, Nick Hodgetts, David Long, Royce Longton, Howard Matcham, Brian O'Shea (chair), Ron Porley, Martin Wigginton.

1. Eustace Jones' hepatic flora of west Africa David Long is dealing with the text, and reported that he had had detailed (and very favourable) comments back from Rob Gradstein and Tamás Pócs. There are a number of changes that are needed, largely to bring the text up to date, to remedy omissions and to correct errors. David thought this would probably take him about a year.

Some concern was expressed that Eustace's text should not be transformed beyond recognition, so it was agreed that omissions and errors could be rectified, that new evidence could be added, but that opinions expressed by Eustace should not be changed.

David was asked to proceed on that basis.

Martin had received agreement to use most of Eustace's drawings, as well as Vanden Berghen's, but he was still waiting for some permissions. When they were received he would have a detailed look at all that was available, and see which illustrations needed changing, and how many were missing (about 20 to 50 taxa may not have existing illustrations). It was accepted that a completely uniform style was not essential. One particular problem foreseen was that the existing drawings may not align with the detail in the text. Robin Stevenson had offered to help with any redrafting of illustrations.

Funding did not need to be determined immediately, but fairly soon. The costs were not known yet, but a number of options had been considered. It was decided that the end of 1995 should be the target for completing both text and illustrations, to publish during centenary year.

2. Future expeditions The previous suggestion of Madagascar was now being viewed less favourably because of problems within the country, and the forested areas of Ruwenzori in Uganda was being pursued as another possibility for 1996. Nick Hodgetts had written to Uganda but had so far received no reply. He was hoping the Darwin Foundation might be a source of funding, but the new application forms were not yet available, but should be received shortly. It was thought that this round of funding was likely to be very competitive. It was suggested that a two or three year study should be proposed. There were other suggestions about possible sources of funding, such as National Geographic.

Nick suggested that Jan/Feb or May were the best times to go to Uganda. It was thought that this locality would build sensibly on the Malawi trip. The priority was seen to get a good local contact.

- **3. Election of executive** It was pointed out that the executive didn't actually do anything, but was there in case any decisions had to be made between AGMs. If any meetings needed to be called between AGMs, they would be held as open meetings. There was no objection to the existing members continuing.
- **4. Any other business** Due to the proximity of dinner, the meeting was curtailed at this point, but there was a request for information on progress with *Bryologia Africana*. Nobody had any recent news, although it was thought that several people were working on revisions intended for *Bryologia Africana*, both for hepatics and mosses.

IAB Conference: Tropical bryophytes: biology, diversity and conservation , *Mexico City, 7-12 August 1995.*

I was wrong in stating in the last Newsletter that Tomas Hallingbäck is organising the scientific programme: he is organising the conservation forum, whilst the rest of the programme is being organised by Claudio Delgadillo. A second circular has now been distributed (although unfortunately I didn't receive one). So far as I know, only Nick Hodgetts and myself are going, but if others are, please let me know. I have agreed to give two papers, on "Endemism and biodiversity in sub-Saharan bryophytes", and also one on the "European contribution to tropical bryology"

Eustace Jones' West African Flora

(Update on information in AGM account.) Good progress is being made in revising the text (David Long) and organising the illustrations (Martin Wigginton), and this will be published in 1996 as one of the BBS Centenary Year publications. A publisher is not yet fixed, but the Royal Botanic Garden, Edinburgh is keen to take it on.

News of members

Tamás Pócs returned in November from visiting several African islands in the Indian Ocean, where he was joined at various times by Bob Magill, and in March returned to Réunion, for a holiday.

Jeff Duckett, Howard Matcham and Nick Hodgetts visited Lesotho in January (not strictly tropical, but part of the East African montane region), and are now processing their extensive collections, including the memorably named Quathlamba. [Quiz question: name the only other bryophyte genus starting with Q].

Len Ellis and Alan Harrington (BM) visited Peninsular Malaysia in mid-March for 3 weeks, looking at the bryophytes of Pasoh Forest Reserve, in Negri Sembilan, about 2 hours drive SE of Kuala Lumpur. This lowland rainforest area is an international centre for research, and the objective of the BM visit was to survey logged and unlogged areas of the forest looking for differences in biodiversity using cryptogamic epiphytes. The collections are now being identified.

Roy Perry's work on his collections from Gambia have resulted in one less country with that embarrassing statistic of zero mosses recorded: his list now has more than 20 taxa, and is almost completed. However, he reports that the bryophyte flora is exceedingly poor, and his list is the result of almost two weeks collecting.

Len Ellis reports that BM has an excellent collection of bryophytes made by A.H. Norkett from the Seychelles over several months in the early 70s. Len has identified the Calymperaceae, but there are still thousands of packets, most with field identifications to family or genus, and he would welcome assistance from anyone who would like to help with identifying the collections, or indeed take some or all of it on as a project through to publication. Norkett's notebooks have good detail of the collections.

Professor Paul Richard's unidentified specimens are now being returned to Cardiff, but most have been identified to genus. Anyone revising tropical genera is advised to contact Roy Perry for the loan of relevant material (see address list for contact details.)

Work continues on processing the collections, in both sending material off and getting identified specimens back. However, the work has slowed down now that those specimens easily placed in family or genus are identified, leaving large volumes (particularly of pleurocarps and hepatics) still to be processed by the expedition members before being sent to experts for identification/confirmation. An update on progress will be given in the next Newsletter.

Any volunteers would be welcome - no experience needed! We would be able to provide support for anyone who would like to have a go at this.

I gave an update on the current position at the BBS AGM paper-reading meeting in September, including also some preliminary conclusions from my work on the African checklist. Several taxonomic publications are now drafted, and one is ready to send to Jeff Bates for possible publication in *J. Bryol.*

New Members/Change of address

All UK phone numbers have now changed, and there are also changes of address for Peter Martin and Chris Curtis. In view of this, a revised membership list is included with this Newsletter. I have also added email addresses where I have them. Let me know of any further changes required, including phone numbers etc. to add.

Bryologia Africana

Bob Magill advises that an update on this will appear soon in *Bryological Times*, and that a positive attempt is now being made to set the ball rolling, and to initiate publications. The intention is to produce small print runs, as cheaply as possible, as treatments are completed, and then to issue them (with further revisions where necessary) as a final book when all parts are complete. Several members of the TBG have agreed to do family treatments (some with no previous experience of doing this). This is a good opportunity to make a real contribution to African bryology. Contact Bob Magill (mosses) or Tamás Pócs (hepatics) if you are interested in participating (see TBG Membership List for addresses)

Tropical Bryology

Volume 10 of *Tropical Bryology* is now available from Jan-Peter Frahm, if you are not already a subscriber. Contents include my 'Checklist of the mosses of sub-Saharan Africa', as well as papers on the bryophytes of Mount Kenya, Zaire, Hong Kong, China, Philippines, Argentina and Brazil.

Flora Neotropica

Two further bryological titles in this series covering tropical America have now been submitted: Neckeraceae by I. Sastre-de Jesus, and *Cololejeunea* by P. Tixier, and over 40 other authors are also committed to publications. Rob Gradstein is the Deputy Director for Cryptogams for FN, and this information came from his review of progress in 1994. It contains a full list of which authors have committed to which family, sub-family or genus. I have a copy, or contact Rob Gradstein directly at: Herbarium, University of Utrecht, Heidelberglaan 2, 3584 CS

Utrecht, The Netherlands - particularly if you would like to contribute a paper.

If you want to subscribe to this series, contact Scientific Publications Department, New York Botanical Garden, Bronx, New York 10458-5126, USA. With the 10% reduction for subscribing to the series, the cost including postage for the two latest volumes is \$32.48 (Lejeuneaceae) and \$16.21 (Stereophyllaceae).

Other publications

I have received details of (but not yet seen) a new book on **Mosses and Liverworts of Hong Kong** by May-Ling So (170 pages, soft cover, 319 colour photos + 11 SEMs, ISDN 0-962-7350-78-8). It covers 100 species of moss and 56 liverworts. (According to So's checklist in *Tropical Bryology* **10**, there are 119 mosses listed for Hong Kong, so this covers most of them.) Available from Biology Department, Hong Kong Baptist University, 224 Waterloo Road, Hong Kong, price US\$30 (postage by air included), local price HK\$120. Make cheques payable to May-Ling So. There are discounts of 30% for developing/East European countries, 10% for 5 copies or more, 20% for 10 copies or more.

Documents

The following new documents have been produced:

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32 - Newsletter 9 (this newsletter)
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There have also been changes to document 9 (list of members-copy enclosed), 11 (the list of documents), and to 21 (Malawi expedition taxonomic responsibilities).

Hepatic List for Sub-Saharan Africa

Martin Wigginton's list of hepatics is nearing completion, but has been delayed by a commitment to complete another project first. The geographic region covered differs slightly from the moss list, in that the Indian Ocean islands are excluded from the hepatics list, as these are covered in a separate publication (now believed to be in press) from Riclef Grolle.

Moss List for Sub-Saharan Africa

This document was completed in late March, and will be published by the time this Newsletter is distributed. Within days of completion I found two references I had missed, and also discovered that one of my new taxonomic combinations was redundant. Subsequently I have seen two more references with relevant information. Updates to the list will thus be necessary, probably annually.

I haven't yet received reprints of the checklist, but let me know if you would like a copy.

Questionnaire

I talk to very few members of the TBG on a regular basis, so I am not sure which TBG members are involved with work on tropical bryology, and which are just interested. Could you please let me know the answers to the following questions:

Are you working on tropical bryology?

If yes: please describe briefly what you are doing.

If no:

Is there a particular field of tropical bryology you are interested in?

If yes: please describe briefly.

If no, I assume you just have a general interest.

Next Newsletter

The next newsletter will be published when there's something to say, so if you have any experience, advice or ideas to share, or you are looking for something to do, get in touch. Please note that I am now also contactable by fax (see below) if you have anything you want to send for the next issue.

Coordinator: Brian O'Shea

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TBG Newsletter 10 - February 1996

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Paul Westmacott Richards (19 December 1908 - 4 October 1995)

I particularly like the story quoted in *The Guardian's* obituary of Paul (October 19): an expedition leader to Guyana was quoted as saying "Oh yes, we will take Richards, but I am not certain we will bring him back." We are all very grateful he did bring him back, for many reasons, but perhaps most relevant here is the support and encouragement he gave us in starting the TBG, and for initiating, against much international inertia, *Bryologia Africana*, which first turned our minds to the little known bryophytes of Africa. It is typical that his extraordinary career should end on a high note with new edition of his classical text on tropical ecology, *The Tropical Rain Forest*. The final proofs are now with Roy Perry, but no date has yet been fixed for publication.

Uganda Expedition

The first TBG Uganda expedition set off on January 19th for Bwindi-Impenetrable Forest, and returned on February 11th. The expedition was organised totally by the participants: Nick Hodgetts, Martin Wigginton, Jeff Bates, Howard Matcham, Ron Porley and Robin Stevenson, with the arrangements in Uganda made by Stephen Byarujali, at Makerere University, who was also accompanied by another botanist from the Department. It went well, and they had nearly two weeks in the Bwindi National Park. They stayed first at the Institute of Tropical Forest Conservation guest house at Ruhiija (2250 m), and looked at forest from about 1500 to 2700 m, but the richest areas proved to be lower, where the mist collected in valleys. The epiphylls were particularly rich, and possible new taxa were found. Some ecological work was undertaken:

- *main (joint) project*: investigate variations in bryophyte diversity and species ranges in relation to altitude within the forest. This involved making full bryophyte inventories for 5 delimited forest plots, 30m square, spaced along an altitudinal gradient.
- bryophyte communities project: delimit the main recognisable epiphyte communities and relate their occurrence to major environmental factors such as altitude, height on tree, slope of bark, type of

substratum. The subjects were five trees in each of the plots used for the main project, selected for their rich and varied epiphytic floras. This may enable comparisons with similar studies in South America and New Guinea.

As there was only hurricane lamps for lighting, very little work could be done in the evening, but the previous experience in Africa of most of the team members made an enormous difference to the quality of the collecting. Apparently the number of packets collected was much less than in Malawi, but with much less duplication of common taxa. The second half of the stay was just to the north of the forest at Buhoma. All group members managed to see gorillas, and one of the habituated groups had taken up residence next to the camp site, and the Queen Elizabeth National Park was also visited at the end to catch up on more wildlife. The birds were recommended: the Great Blue Turaco was the star of the forest, but great numbers of other exotica were seen in Queen Elizabeth National Park.

Logistics proved satisfactory apart from a lethal landrover, and Martin is to be congratulated for undertaking most of the organisation. Lessons continue to be learned, and it is possible now to have a better view of what should be done on future expeditions, and how to do it. Next year's proposed destination (Mgahinga) is likely to be changed, as it is not only well worked already, it is not likely to provide much different to that already seen at Bwindi. Instead, there are plenty of interesting upland/montane forests elsewhere in Uganda, and these will now be considered. Another possibility is that the number of visits could be increased, with less people going on each trip. It is also now likely that a bryophyte course will be arranged, either at Kabale or Kampala, to be organised by Jeff Bates, hopefully with the assistance of Royce Longton, in co-operation with Makerere University. The collections were made and will be processed in a similar way to those from Malawi, but the postcollecting procedure will be made more flexible. In particular, the experience gained in Malawi, and subsequently in Lesotho by Nick and Howard, suggests that things will progress much more quickly if people identify their own material, and only send material to outside experts for confirmation, or when no-one on the team can identify it. This of course is only possible because of the experience now built up by the team (only one had not collected in Africa before). There will still be coordinators for each taxonomic group to deal with problems and manage writing up and dealings with experts.

Other Ugandan collections Len Ellis and Francis Rose have pointed out that there are still extensive Ugandan collections in BM that remain unidentified. I made a quick check at BM, which revealed that five collections in particular would benefit attention:

- Francis Rose Sep-Oct, 1961: about a thousand moss and liverwort collections from several areas of Uganda, including the SW (where the BBS Expedition is going) and Mt. Elgon. As there are about 15 boxes full, I didn't have time to look at these in detail, but a large proportion, particularly the mosses, appear not to have any identification.
- *J.G.B. Newbould Sep 1959:* 167 mosses, all labelled to genus, from Ruwenzori Mountains. (Now a few less, as I passed the Sphagnaceae on to Alan Eddy, and Calymperaceae to Len Ellis!)
- *J.P. Loveridge Jan 1962:* 44 mosses and 30 hepatics from the Ruwenzori, provisionally identified by Jennifer Dodd in 1964.
- *M.E.S. Morrison Jan 1962:* 59 specimens from Kisoro, in the very SW of Uganda, only a few miles from Bwindi. Many have provisional names.
- A.K. Miller Apr 1962: 52 specimens from Kisoro, and from Budongo in the W of Uganda.

There are also parts of other collections, not all well annotated, some dating from the 30's, and all in the boxes as transferred from Kew. I did not have time to look at these, nor boxes that were just marked 'Uganda hepatics'.

It would be very easy to confirm the identifications of Loveridge collections, and also to complete the identification of many of the Newbould, Miller and Morrison collections. The Rose collections are likely to be the most fruitful, as they are collected by an experienced bryologist in a wide range of locations and habitats - but there will be a lot of work. I would like to have a go at these myself, but would welcome any assistance. Those who do not see themselves as adequately qualified should read about Elinor Wiltshire in the 'news of members' section. The collections must either be looked at in the NHM, or they

can be loaned to recognised institutions.

Uganda Checklist Martin Wigginton and I are producing a checklist of the bryophytes of Uganda (with localities, collection numbers etc.), but have not been able to complete it before the expedition, although lists of taxa are available. Alan Crundwell also has material he has collected himself from Uganda, as well as material collected by others, most of which have been identified but not all published, so there is already a good foundation of herbarium material to add to the literature references.

Other work in Uganda Sabine and Georg Miehe, who have produced an excellent book on the ericaceous zone of the Ethiopian highlands (see new books, below), hope to continue their studies in the same zone of the Ruwenzoris during 1996. It is hoped that the two expeditions can be mutually beneficial.

BBS TBG AGM - 24 September 1995

Those attending: (A list was not kept of those attending.)

- **1. The notes of the previous meeting** The notes of the September 1994 AGM (published in Newsletter 9) were agreed.
- **2. Eustace Jones' hepatic flora of west Africa** The text for the volume was now in good order, and had been reviewed by Messrs. Grolle and Pócs. A number of questions were raised, and Martin Wigginton agreed to circulate the answers for comment to all attendees, and others as appropriate. The drawings were going rather slower. Martin was about three quarters through acquiring the drawings, but there was still a lot of work to do. The drawings would not be ready by the end of the year, and it was suggested that more illustrators should be found. Martin and David Long were asked cooperate on preparing a small genus as a prototype, to show to publishers. Martin was asked to check whether the cost of Rotring pens and draughting film could be refunded. It would be a couple of months before the scale of the problem could be assessed.
- **3. Uganda expedition** Definite dates had now been agreed for the first expedition: 19 January to 11 February 1996. Flight bookings had been made. Most aspects had been arranged, but the borrowing of transport had yet to be confirmed. Membership of future expeditions would be decided after the return of the first expedition. A further meeting of the participants would take place before departure.

4. Updates

 Malawi collections/publications Brian O'Shea agreed to maintain the numbering of papers for publications.

[The following items appeared on the agenda under this item, but were not dealt with due to shortage of time:

- IAB Conference in Mexico, Aug 1995
- African moss and hepatic checklists
- Bryologia Africana
- Questionnaire
- Next Newsletter]
 - **5. Election of executive** There was no objection to the existing members continuing.
 - **6. Any other business** None, due to shortage of time.

7. Date and place of next meeting 21st September 1996, Ness Botanic Garden, Wirrall, following the BBS AGM.

IAB Conference: Tropical bryophytes: biology, diversity and conservation, *Mexico City, 7-12 August 1995.*

A mention of this meeting appeared in the latest *Bryological Times* (Vol. 85, October 1995). Nine members of the TBG attended this conference: Jan-Peter Frahm, Lars Hedenäs, Nick Hodgetts, Royce Longton, Angela Newton, Brian O'Shea, Tamás Pócs, Lars Söderström and Ben Tan, all of whom gave talks. The proceedings are to be published in *Anales del Instituto de Biología - Serie Botánica*, although I haven't yet finished writing my paper, and so it will be published elsewhere. The conference was quite small (40 attendees), but had a varied and interesting programme, and two very good field trips, one of two days duration. This allowed us to get a picture of tropical bryophytes in a wide variety of habitats, from wet forest to the top of a volcano. It was also a great treat to be accompanied by people who could give fairly accurate names to everything in the field!

Eustace Jones' West African Flora

The text has now been more or less completed by David Long, but the illustrations remain a problem. Martin Wigginton has collated all the available illustrations, but there are still some taxa without illustrations, but in other cases they will need to be re-drawn or amended. Martin hopes to put a request in the *Bulletin* for help with this task. The book should certainly be finished in the BBS Centenary Year, but it will now be quite tight getting it published in 1966.

News of members

In the last newsletter, I mentioned that BM had an excellent collection of bryophytes made by A.H. Norkett from the Seychelles over several months in the early 70s. **Elinor Wiltshire** has now agreed to start working on these, and is making progress. Many of you will know Elinor as an ex-BSBI official, as well as a BBS member who has published several items on the bryophytes of the London area, and is currently surveying the bryophytes of Buckingham Palace gardens. She has never been involved with tropical bryology before, but she is proving that this is no barrier to making a positive contribution. She has now been encouraged to join the TBG.

New member **Markus Meier** works in the Species Survival Unit of IUCN in Switzerland, and has already made two visits to Uganda, including a course at Kabale Forest, a few miles south of Bwindi. He has yet to spend much time on his collections, but clearly could contribute to the TBG project.

New member **Hans Kruijer** (Leiden, Netherlands) is revising the Hypopterygiaceae of the world (and has also identified our Malawi material from this family).

Jeremy Roberts (a BBS member, but not a TBG member) was hoping to visit Aride in the Seychelles last summer on an ornithological trip, but hoped also to collect bryophytes.

Robin Walls (a newish BBS member from Bournemouth) worked in western Samoa for a month last summer, and was able to collect some bryophytes. He hopes to identify these before he (hopefully) returns this year for a longer visit.

Mark Seaward will be participating in an expedition later this year to the Chagos Islands, in the Indian Ocean (part of the Africa-3 bryogeographical area), and will be collecting bryophytes.

Patxi Heras and **Marta Infanta** continue working through their collections from Rio Muni (the mainland part of Equatorial Guinea). A search last year through the herbarium at Real Jardin Botánico, Madrid, revealed a small collection from Bioko (Fernando Po). The collection contains 14 samples collected in January 1947 by Emilio Guinea López, but they were not included in the garden database as they were not identified. Guinea collected extensively in Bioko and Muni, but Patxi believes that most of the bryophyte collections have disappeared, leaving only these few. Most of the liverworts were growing on the larger mosses (such as Meteoriaceae) that had obviously attracted Guinea's attention, and are on the whole common species.

Frank Müller (Dresden), who was a member of the BRYOTROP expedition to Zaire and Rwanda in 1991, visited Bioko in 1994, and has found a number of plants new to the Equatorial Guinea list. I will add him to the TBG list so he will receive a copy of this newsletter, and make sure he is in touch with Patxi Heras and Marta Infanta.

Jeff Duckett, **Howard Matcham** and **Nick Hodgetts** who collected in Lesotho and Natal last year have made good progress in identifying their collections, and have found many rare plants, including ones new to the continent and to southern Africa, as well as a possible new species to science. We await their publications on this fascinating area with great interest.

Roy Perry's Gambia list is now virtually complete, but some species still require verification. Theo Arts (Belgium) recently visited Gambia and has passed his records to Roy for inclusion in his list, and Roy himself returned there recently.

Cliff Townsend continues to work on his own collections, most recently from Belize and Costa Rica, as well as older collections from India and Sri Lanka. Many of his African collections also still require identification. He is also involved in identifying the mosses of an ongoing Kew project in Cameroon.

Herman Stieperaere comments that about 25% of the BR (Brussels) African herbarium is unnamed, so if anyone wants to visit the herbarium at Meise I am sure they will be welcomed!

Michelle Price, a student of Tony (AJE) Smith at Bangor, is working on the ecology (particularly with respect to growth form) of bryophytes growing on *Polylepis* in the Ecuadorian paramo. She visited Ecuador from August 1995 through to early January this year.

Mulanje Mt. Expedition

Identification Work continues on processing the Malawi collections, in both sending material off and getting identified specimens back. Several of our experts have asked for specimens not to be sent for the time being, either because they have enough to deal with already, or because they haven't yet got time to look at them. In some cases revisions are necessary before taxa can be identified. For this reason, the 'sent' totals for several families in the table below include material we are still holding. With such large numbers involved, not everyone is able to provide accurate figures easily, and so some figures are estimates. The figures shown are likely to be under- rather than over-estimates.

Where groups have already been written up for publication (see below), experts are not always very keen to look at even more specimens, as the publications should make it possible for people to identify them for themselves, or for someone else to do them. **Anybody who would like to help with this task should contact me.**

We still have several hundred packets (particularly of pleurocarps and hepatics) still to be processed before being sent to experts for identification/confirmation. Similarly assistance with this task would be welcomed - no

experience needed! We would be able to provide support for anyone who would like to have a go at this.

Mosses	Sent	Ident.	Taxa	New
Andreaeaceae	28	28	4	4
Anomodontaceae	5			
Archidiaceae	2			
Bartramiaceae	89			
Brachytheciaceae	30	15	7	6
Bryaceae	120	5	2	0
Calymperaceae	105	87	10	6
Cryphaeaceae	3			
Daltoniaceae	21			
Dicranaceae:Campylopus etc.	319	273	25	11
Dicranaceae:Leucoloma/Dicranoloma	127			
Ditrichaceae	30			
Entodontaceae	6			
Erpodiaceae	6	6	3	3
Fabroniaceae	4	4	4	1
Fissidentaceae	220	152	12	9
Funariaceae	24			
Grimmiaceae	28	19	4	4
Hedwigiaceae	19			
Hookeriaceae	58			
Hypnaceae	104			
Hypopterygiaceae	37			
Leucobryaceae	51			
Leucodontaceae	11			
Meteoriaceae	130	130	8	1
Mniaceae	22	22	1	0
Neckeraceae	79	79	5	4
Orthotrichaceae	47	2	1	0
Polytrichaceae	65			
Pottiaceae	51	51	8	4
Pterobryaceae	7	1	1	1
Racopilaceae	36			
Regmatodontaceae	3			
Rhachitheciaceae	1			
Rhacocarpaceae	27			
Rhizogoniaceae	8			
Rigodiaceae	18	14	1	0
Sematophyllaceae	109			
Sphagnaceae	80	0	4	0
Splachnaceae	6	5	1	0
Thuidiaceae	81	64	5	1
Trachypodaceae	12			
Mosses Total	2229	957	102	55

Liverworts	Sent	Ident.	Taxa	New
Acrobolbaceae	6	6	2	2
Adelanthaceae	4	4	2	1
Allisoniaceae	1	1	1	0
Aneuraceae	16	1	1	1
Anthocerotaceae	10			
Arnelliaceae	7	7	2	1
Aytoniaceae	8	8	2	1
Calypogeiaceae	39			
Cephaloziaceae	14	12	5	4
Cephaloziellaceae	18	14	4	3
Codoniaceae	7			
Frullaniaceae	85	85	10	4
Geocalycaceae	79	27	9	2
Gymnomitriaceae	2	2	1	1
Herbertaceae	28			
Isotachidaceae	4			
Jungermanniaceae	174	52	11	7
Lejeuneaceae	221	113	48	28
Lejeuneaceae: Colura	24	24	5	4
Lepidoziaceae	28	28	3	1
Lunulariaceae	1			
Marchantiaceae	1	1	1	0
Metzgeriaceae	46			
Pallaviciniaceae	85	85	5	1
Plagiochilaceae	68	68	9	6
Porellaceae	8	8	2	2
Radulaceae	57	57	9	6
Ricciaceae	1	1	1	1
Targioniaceae	1			
Wiesnerellaceae	2	2	1	0
Liverworts Total	1045	606	134	76
Grand Total	3274	1563	236	131

The percentage of taxa new to the known flora of Malawi remains the same at 56%.

Publications Three taxonomic papers have now been accepted by Jeff Bates for J. Bryol. These are:

- 3 Erpodiaceae, by Nick Hodgetts
- 4 Dicranaceae: Camylopodioideae, by Jan-Peter Frahm and Brian O'Shea
- 5 Neckeraceae, by Johannes Enroth and Nick Hodgetts

Several more papers are in draft, and work is underway on others.

(Only names are shown here - full details are sent to members.)

- Patxi Heras Change of address
- Hans Kruijer
- Howard Matcham Change of address
- Markus Meier
- Frank Müller
- Michelle Price
- Paul Richards Died 4.10.95. See note at start of this newsletter.
- Elinor Wiltshire

Bryologia Africana

Work is progressing actively with this project on several groups, but little information has been forthcoming about progress, or who is doing what etc. The promised update in the *Bryological Times* has not appeared. Several members of the TBG have agreed to do family treatments (some with no previous experience of doing this). This is a good opportunity to make a real contribution to African bryology. Contact Bob Magill (mosses) or Tamás Pócs (hepatics) if you are interested in participating (see TBG Membership List for addresses).

Tropical Bryology

Volume 11 of *Tropical Bryology* was published in October 1995. It contains 3 papers giving results of the BRYOTROP expedition to Zaire and Rwanda, covering ecological grouping by altitude, life forms and adaptations of epiphytes as affected by altitude and water, and life strategies of epiphytes, as well as two articles on epiphylls. It is available from Jan-Peter Frahm, if you are not already a subscriber.

Other publications

Mosses and Liverworts of Hong Kong, Volume 2 by May-Ling So. Volume 1 was mentioned in the last newsletter, and volume 2 is now available with a further 103 taxa. Like the first volume, it is very good value, with excellent detail and habit photographs. Available from Dr. May-Ling So, Biology Department, Hong Kong Baptist University, 224 Waterloo Road, Hong Kong, price US\$30 (postage by air included), local price HK\$120. There is a 10% reduction if you bought the first volume, and a further 10% if you are BBS/IAB member, so the price goes down to \$27, or \$24.30. Make cheques payable to May-Ling So. Vol. 2. comes with a set of postcards based on photos from the book, and also a delightful book-mark including a mounted bryophyte. There is now a discount to members of IAB for volume 1, giving a cost including air delivery of \$27.

The Hepaticae and Anthocerotae of the East African Islands. An Annotated Catalogue (1995) Riclef Grolle. *Bryophytorum Bibliotheca* 48, 178 pp. Available from Koeltz Scientific Books, PO Box 1360, D-61453 Königstein, Germany. DM 80, + 7% VAT + postage. Rather expensive, but another piece of the jigsaw of African bryophyte distribution.

LATMOSS. A Catalogue of Neotropical Mosses (1995) Claudio Delgadillo M., Bernadino Bello and Angeles Cárdenas S. *Monographs in Systematic Botany from the Missouri Botanical Garden* 56, 191pp. Available from Department Eleven, Missouri Botanical Garden, PO Box 299, St Louis, MO 63166-0299, USA. US\$21+\$3 for handling. You can pay by credit card, by fax on +1-314-577-9594, or by email to dept11@mobot.org. This is a full listing of all mosses in Index Muscorum zones AM2-AM5, plus Uruguay from AM6, giving their distribution by

country, and literature references. The book is to be reviewed in a future J. Bryol. [Thanks to Claudio Delgadillo, users of TAXA already have this data available, with updated taxonomy, and it assisted in producing my list of African endemics.]

Mosses of Guatemala (1949, reprinted 1972) E.B. Bartram. 442pp. This extremely useful book covering over 500 species is still available from MBG (see previous title for address) for \$17.50+\$3 handling charge, but may also be available from NHBS (see below) - it used to be on their list for £9.50.

Mosses and liverworts of rainforest in Tasmania and south-eastern Australia (1995) S.J. Jarman and B.A. Fuhrer. 134pp. Available from: CSIRO Publications, PO Box 89 (3124 Albert Street), East Melbourne, Victoria 3002, Australia. I'm not quote sure of the price, but it is around £20 including P&P. (I know Tasmania isn't tropical, but it does have rain forests.) This book contains excellent photos of 120 species, with a short introduction on bryophytes, including their rôle in forest ecosystems. There is a checklist of species found in Tasmanian cool temperate forests, excluding higher altitude forests. Don't be without it on that trip to Tasmania!

The Mosses of Amazonian Ecuador (1994) Steven P. Churchill. *AAU Reports* 35. 211 pp. Available from Aarhus University Press, Aarhus University, DK-8000 Aarhus, Denmark. The book was invoiced to me (including P&P) at £14. The book covers Ecuador east of the Andes, below 600m - the western (upper) part of the Amazonian basin. 119 mosses are treated, with keys and descriptions for all taxa. The taxa are dealt with in alphabetic order of family - a method I have not come across before, and not one I find particularly helpful. The book is described as a 'florula' - a cheap and cheerful flora to help identification work in the area and stimulate further fieldwork.

Musgos Acrocárpicos do Estado de Rondônia (1993) Regina Célia Lobato Lisboa. 272pp. Published by Ministério da Ciência e Tecnologia , Conselho Nacional de Desenvolvimento Científico e Tecnológico, Museu Paraense Emílio Goeldi, Belém, Pará, Brazil. I got no response from Brazil, so bought it via Natural History Book Service Ltd., for £16.99. [See note below about NHBS.] Rondonia is a state of Brazil, on its border with Bolivia. The book contains an introduction to the area, bryophytes in general, and to bryophytes in Rondonia, including details of the collections the author and her colleagues made between 1982 and 1988. 69 species are described in some detail, giving details of all collections examined. As only a small proportion of the state exceeds 600m, this should cover a similar range of taxa as Steve Churchill's book (see above), but appears to contain over 20 more. Depends on how good your Spanish is!

Ericaceous Forests and Heathlands in the Bale Mountains of South Ethiopia (1994) Sabine & Georg Miehe. 206pp. Published by Stiftung Walderhaltung in Afrika, Rote Brücke 6-15, D-22113 Hamburg, Germany. There is no indication of the price. This is a very detailed account of the ecology of the area. Bryophytes are a significant element in the flora, and the extensive list of plants includes 54 hepatics and 118 mosses which includes a large number new to Ethiopia, and one genus and species new to science (*Lasiodontium miehei* Ochyra). There are 150 photographs, all but nine in colour, showing general views, and with more detail about the vegetation including close ups of bryophytes, and also some of the fauna.

Malesian Mosses - Part 3 (1996) Alan Eddy. Alan has returned the final proofs of this volume, and publication is scheduled for April 29th. More details next time. Meanwhile, vol. 4 is well under way...

The Natural History Book Service Ltd. (NHBS), mentioned above, is at 2-3 Wills Road, Totnes, Devon TQ9 5XN, and will take orders by fax on 01803-865280, by email from nhbs@nhbs.co.uk, and also via their WWW (World Wide Web) site (http://www.nhbs.co.uk). For those with Internet access, the WWW site is extremely useful as it is possible to search through the entire NHBS catalogue by category, so providing they have indexed everything correctly, you should be able to get their full and extensive list of bryological books - and they can be ordered while you are on-line. They are also very helpful on the phone (01803-865913). It is usually cheaper to buy direct from foreign publishers than via NHBS, but it may be a lot easier to let NHBS do it. They will also get any book in print for you, even if it's not in their catalogue.

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

Hepatic List for Sub-Saharan Africa

Martin Wigginton's list of hepatics is now awaiting publication (probably in *Bryophytorum Bibliotheca*), and supplements Grolle's list of the 'Africa-3' islands (see above). Anyone who wants a copy of my "Checklist of mosses of sub-Saharan Africa", please let me know and I will send one.

Documents

The following new documents have been produced:

- 33 Key to African species of *Jungermannia* (see *Jungermannia* key).
- 34 Newsletter 10 (this newsletter)

Travel to Africa

Martha Newton has kindly passed on a circular from a company called Key Travel, who specialise in air travel to Africa and can offer 'subsidised air fares for charity, religious and environmental clients'. They are members of ABTA, IATA and ATOL, and are also an authorised 'raptim' agent, which appears to be something to do with charitable and religious organisations. I haven't checked their fares (for instance it would be interesting to see whether they could give a cheaper fare to Entebbe than was found by this year's Uganda expedition). They are at 92-96 Eversholt Street, London NW1 1BP, reservations 0171-387 4933, admin 0171-387 3802, fax 0171-387 1090. They also have an office at 3rd floor, Royal Buildings, 2 Mosley Street, Manchester M2 3AN, tel. 0171-237 4300. If anyone tries them, please let me know the result.

Australian Tropics

Anyone interested in sampling the Australian subtropics should attend the IVth Australasian Bryophyte Workshop 1996, July 1st to 15th, which will be held in southeast Queensland. There are two field trips of 2 days each (bryophyte-rich rainforest, including canopy epiphytes at close range via a walkway, and a large sand island with rainforest, heathlands and lots of sun & beach), and two days of seminars and lab work. Registration should be by 15th February, but as this Newsletter will not reach you by this date - REGISTER IMMEDIATELY. Please contact Dr. Dana Bergstrom, Department of Botany, The University of Queensland, Brisbane, Queensland 4069, Australia. Phone +61 7-3365 1699, fax +61 7 3365 1699, email: d.bergstrom@botany.uq.edu.au.

Questionnaire

In the last Newsletter I asked what particular interests members had in tropical bryology. I received a number of replies which have gone into 'news of members', and one from Heike Hoffman saying that she would love to be working on tropical bryology, but there was first this matter of a thesis to be written....

For the future, please just keep me informed about anything you are doing that could be put in the newsletter.

Quaesticula

Discussing the exotically named *Quathlamba* in the last issue, I mentioned that there was another moss genus beginning with Q. This is the equally excitingly-named *Quaesticula* Zander, 1993 (Pottiaceae). *Quaesticula* means 'slight profit', which "refers to the long and careful evaluation required for placing the new genus in proper taxonomic perspective, and is patterned after the hepatic [sic] name *Pinguicula*". [I think this translates as something like 'little value'!]. If there had been a prize for possessing this valuable piece of information, Howard Matcham would be the winner, and Richard Zander also deserves one for being one of the few bryologists who reveal themselves in public as having a sense of humour (if we exclude Messrs. Müller and Stephani).

Next Newsletter

It takes quite a long time writing all this stuff, so I would be very grateful for contributions. Please send your contribution on disk if possible, and written using a Windows word processor, or by email. If you have any experience, advice or ideas to share, or you are looking for something to do, get in touch.

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TBG Newsletter 11 - October 1996

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BBS TBG on the World Wide Web!

The new BBS Home Page is now being built on the internet's World Wide Web (WWW), and the bulk of the content at present is TBG material. The BBS site is now formally announced, and it can be found at the Royal Botanic Garden Edinburgh, managed by David Long, and can be accessed on:

___http://www.rbge.org.uk/bbs

All the TBG material was initially loaded with the rest of the BBS documents at Edinburgh, but I have now moved them to my own home page to make maintenance easier, and added quite a few more, so they can be accessed directly from:

__http://www.oshea.demon.co.uk/ as well as from the main BBS page.

David Long has been appointed the 'Internet editor' for the BBS, and so all documents must be agreed by him before being loaded. He will be responsible for arranging the loading of files at Edinburgh, and I will load the TBG files. We gave a short talk to the BBS AGM Symposium on this subject, and were able to demonstrate the page live from Ness Botanic Garden's computers. All the TBG documents loaded so far are based on existing paper documents, and I will continue to issue new TBG documents both on paper and on WWW, but I will develop them for the web first, and print them from there, so they won't look the same as if they had been produced by a word processor. Well over half of the TBG have email addresses, but I have no idea how many have web access. Before this newsletter is distributed I will email all those for whom I have email addresses, asking them to download the newsletter themselves from WWW, rather than it being posted to them. For any who don't have WWW access, it will still be posted.

For those of you haven't seen WWW, it is a way of allowing documents to be viewed on-line, but also to be dynamically linked to other related documents, so you navigate your way backwards and forwards through all the documents. (The same method is used by MS Windows-style 'help' files.) This has become known as 'hypertext' and there is a HyperText Mark-up Language (HTML) that has to be added to existing text documents to make them usable on the web. This can be quite tedious to do for existing documents, although it is relatively easy to enter new documents directly, using special 'hypertext editors' which insert all the HTML codes. What it means is that all formatting information has to be in a standard non-proprietary format, so that any WWW viewer (such as Netscape, Microsoft Internet Explorer, Mosaic etc.) can interpret the documents. This means that different viewers don't always display the same document in exactly the same way, but they will all

be able to display it. As Netscape is used by around 80% of users, this is the viewer with which the BBS home page has been tested.

I have made reasonable progress with converting the documents to WWW format, but as you will see there is still some way to go. All new documents are being added as they are produced (e.g. this newsletter).

New opportunities

The ability to link documents opens up many opportunities. As an example, the continuing translation of identification keys means that we could set up a hierarchy of keys of African bryophytes: if we load Petit's pleurocarp key, the resulting families or genera can be linked to keys derived from other sources, and possibly to literature references in Pócs and O'Shea's 'African identification literature' paper. Robin Stevenson has already linked three papers on the Hookeriaceae in this way, and this is now implemented on WWW. I will progress this particular idea as time permits, but I would be grateful for any other ideas and suggestions you might have - and also any help from anyone with any HTML experience.

TBG membership addresses on-line

I have already put a few of the TBG members names and addresses on file, having got permission from the individuals concerned. I intend to put the whole list of names on-line, with as much of each address as you wish to be revealed. (The issue here is that the list of names can be downloaded by anyone who accesses it, and presumably can then be used for direct mailing etc. - but I can't imagine it is worth anyone's time and energy to add less than 50 names to a mailing list!)

Thus:

- 1. I will load all names unless I hear from you within a month of issuing this newsletter.
- 2. I will only include contact details for those who give me specific permission to do so. Please state which parts of your details I can include, e.g. work address, home address, telephone number (home and work), fax number, email address etc. The information I have already is what appears in the last list of members you received, plus amendments as included in the newsletters. It would be useful if you could repeat your current details (so I can confirm that the details I have already are correct), including information you don't want loaded on WWW but are happy to circulate within the TBG.

BBS Tropical Bryology Group Annual General Meeting, 21 September, 1996

Those attending: Sean Edwards, Len Ellis, Nick Hodgetts, David Long, Royce Longton, Howard Matcham, Brian O'Shea, Roy Perry, Ron Porley, Gavin Stark, Martin Wigginton.

The meeting took place at Ness Botanic Garden before the BBS AGM, and was continued at Burton Manor prior to the Centenary Dinner.

- **1. Notes of the previous meeting** The notes of the September 1995 AGM (published in Newsletter 10) were agreed.
- 2. **Eustace Jones' hepatic flora of west Africa** David Long stopped working on the text about 9 months ago pending a decision on the illustrations, although there was more work needed to bring the text up to date. It was emphasised that there seemed to be no intention on Eustace Jones' part that the text should be associated with illustrations, and the text could be published on its own. It was felt strongly however (and this was supported by the BBS Council) that illustrations would add greatly to the text. Martin Wigginton, who is coordinating work on the illustrations, supported this view as existing illustrations are not all easily available. He had received permission from all relevant publishers to use existing illustrations, although some of these would

need altering or extra detail added, but for some taxa there were no illustrations available. Jeff Duckett was sure that money could be made available, and an artist had been asked whether she could undertake the work. A precise specification would be produced to manage the work. It was not yet possible to draw up a timescale for this work.

3. Uganda Expedition The dates have been fixed for the second Uganda expedition (January 17th 1997 to 14th February), a draft detailed itinerary has been produced, and five people from the UK will be going: Nick Hodgetts, Ron Porley and Martin Wigginton to provide continuity from the previous expedition, together with Brian O'Shea and Gavin Stark. Transport was something of a problem on the last expedition, and it is hoped that co-operation with colleagues in Norway will allow us to borrow newer vehicles. Planning for the third trip will be left until after the return of the second trip.

A first report has been produced about the January/February 1996 trip, and distributed to the Darwin Initiative Fund, those involved in Uganda, those involved in the UK, and the BBS Librarian. Identification of specimens is progressing, and named material will be taken back next January. Individuals are spending between 10 and 20 hours per week on identification work. Material is being exchanged between expedition members to confirm identifications, but no responsibilities have yet been set for co-ordinating data for individual families (which will be necessary for publication). Getting hold of literature is still causing some problems.

A meeting to confirm progress, check identifications and confirm understandings about the next expedition will take place probably in November.

Nobody was quite sure whether a decision had yet been made about where the sets of specimens will be lodged. Minutes of previous meetings will be checked, and if no specific agreement has been made a decision will be confirmed at the November meeting. The feeling was that the first set would go to Edinburgh, and the next set to Makerere.

4. TBG on the Internet It was reported that most TBG documents were now on the Internet (World Wide Web) on the BBS Home Page, and that all new documents were being put there first. The BBS Home Page is on:

___http://www.rbge.org.uk/bbs but the TBG pages can be accessed directly on : ___http://www.oshea.demon.co.uk/tbg.htm

5. Updates

Malawi Royce Longton reported that specimens are now being prepared at Reading for distribution. Packets are not being split if small, but where there is more than one collection for a taxon, the packets are being shared out amongst the recipients. Samples of all collections will go to Edinburgh.

African hepatic checklist Martin Wigginton reported that this would be published in November/December in the *Bryophytorum Bibliotheca* series.

Bryologia Africana No news was available of progress on this, and nothing has been published since the invitation to contributors in 1991.

Newsletter 11 This was in progress, and would be published with the notes of the AGM.

- **6. Election of Executive** A general discussion took place about the rôle of the Executive Committee, and several areas were mentioned where it was thought that the TBG executive should be active regarding the future direction of the TBG. Topics needing discussion/resolution were:
 - need to actively retain strong links with the rest of the BBS;
 - need for forward planning, for instance what are we going to do after the Darwin funds run out;
 - are we addressing the needs and interests of all TBG members for instance foreign members, and

members who are not yet actively involved.

The meeting had to close at this point, which left the existing Executive Committee in position, but with the remit to review the rôle of the Executive and the TBG as a whole.

7. Any Other Business None.

8. Date of Next Meeting September 13th 1997, at Chichester, provided the BBS confirm this as the date and place of the next BBS AGM.

Uganda Expedition

An account of the January/February 1996 expedition appeared in Newsletter 10, but there is some progress to report. About 1500 collections were made in Bwindi, together with a few collections in other forest areas. On the basis of past experience, this is likely to result in about 5000 vouchers to name. Many were named to genus in the field, but only a few to species. About a third of the collections have undergone a preliminary sort into family and genus, and by May about 150 of these had been named to species, a number of which have not previously been published for Uganda:

Anthoceros sambesianus

Aphanolejeunea capensis

Arachniopsis diacantha

Cololejeunea duvignaudii

Colura calyptrifolia

Diplasiolejeunea aulae (otherwise known only from single collections in Ghana and Rwanda)

Dumortiera hirsuta

Frullania depressa

Frullanoides tristis

Herbertus capensis

Lejeunea acuta

Mastigophora diclados

Odontolejeunea lunulata

Pallavicinia lyellii

Prionolejeunea grata

Radula quadrata

Telaranea nematodes

Campylopus pyriformis

Daltonia latimarginata var. madagassa

Fissidens borgenii

Fissidens bryum

Hookeriopsis ambigua

Hyophila involuta

Hypopterygium laricinum

Lepidopilidium theriotii

Lepidopilum lastii

Leptodontium capituligerum

Leptodontium luteum

Macrocoma tenue var. tenue

Porotrichum usagarum

Pseudocrossidium porphyroneura

Pyrrhobryum spiniforme

Rhizofabronia persoonii

Syrrhopodon gardneri

Syrrhopodon graminifolius Syrrhopodon lamprocarpus Zygodon dioicus

A first project report has been produced for the Darwin Initiative, summarising the aims and objectives of the project, with some detail about the first year's expedition.

The January/February 1997 trip will be to a number of forests in the west and south-west of Uganda. At present it is hoped to visit the following: Budongo Forest Reserve, Bugoma Forest Reserve, Kibale Forest National Park, Itwara Forest, , Kanyanchu Forest, Kalinzu Forest, Mabira Forest, Ishasha Gorge, Buhoma Forest, Mgahinga Forest and a short reconnaissance visit to Rwenzori in preparation for the 1998 expedition.

Other Ugandan collections Little progress has been made with the many unidentified Ugandan specimens in BM, due to other pressures, particularly the need to process the backlog of Malawi specimens.

Uganda Checklist Some progress has been made with the hepatics checklist for Uganda, but I have made very little progress with the mosses. The sheer volume of collections in BM from Uganda suggests that a 'locality plus collections' level of detail will be too cumbersome, particularly for mosses, and a fairly cursory look showed that there are a number of taxa previously unpublished for the country in these collections, and so some effort will be needed to work through these. Although we have working lists from the literature, it may be necessary to combine our own data with herbarium data and possibility produce dot maps, or at least district-based distributions.

World Conservation Monitoring Centre

The WCMC provides information services on the conservation and sustainable use of species and ecosystems, and supports others in the development of their own information management systems. The BBS provided information to them in 1994 on our Malawi data as part of an 'Availability of Biodiversity Information for East Africa' project, and this was incorporated into their database. We received a copy of this database earlier this year, which lists the results of around 350 completed questionnaires, concentrating on Kenya, Tanzania and Uganda. It contains an entry for each response, listing the biodiversity data available. The database can be searched. The database is DOS-based, fits on one disk, and there is a short user guide, if anyone would like to try it. It provides some useful information about Uganda, but there is very little bryophyte data other than from Tanzania.

Eustace Jones' West African Flora

The situation is little changed: the text has now been largely completed by David Long, although further work needs to be done to bring it up to date, but the illustrations remain a problem. It is now hoped that a professional illustrator may be sought to tidy up the drawings. No date has been fixed for the end of this work, as the money is not yet available.

News of members

Len Ellis will be in Thailand from 5 - 28 November: mostly holiday (12-28 Nov.), but from 5 - 12 Nov. will be bryologically exploring Doi Chiang Dao limestone massif (northern Thailand), collaborating in a biodiversity assessment being undertaken by Chiang Mai University.

Angie Newton has continued her work on the Guianas, and recently visited Europe to look at material in BM,

particularly the bryoflora of tepuis, which appears to be a habitat little collected for bryophytes.

Michelle Price has completed her MSc at Bangor on the ecology (particularly with respect to growth form) of bryophytes growing on *Polylepis* in the Ecuadorian paramo. She spent some weeks in June at Missouri Botanic Garden identifying the material (including one possible new species), and was subsequently offered a PhD course there, working on the taxonomy of *Pilotrichella*. She left at the end of July, and hoped to attend the ABLS meeting in Seattle before starting at St. Louis.

Jeremy Roberts' collection of bryophytes from Mahé island, Seychelles, is being identified by Brian O'Shea (mosses) and Martin Wigginton (hepatics). All apart from one specimen is now identified, and a short note will be produced, as this work was not finished in time to include it in the recently published Seychelles checklist. **Mark Seaward** participated in an expedition to the Chagos Islands, in the Indian Ocean (part of the Africa-3 bryogeographical area), and is now in the process of identifying his collections.

Mulanje Mt. Expedition

Identification Work continues on processing the Malawi collections, but much work is completed and awaits writing up. Naturally the work on Uganda bryophytes has diverted some effort from this, but attempts are being made to tidy up loose ends. We still have several hundred packets (particularly of pleurocarps and hepatics) still to be processed before being sent to experts for identification/confirmation. Assistance with this task would be welcomed - no experience needed! We would provide support for anyone who would like to have a go at this.

allocated:
____6 Hypopterygiaceae, by Hans Kruijer
____7 Adelanthaceae, Porellaceae & Schistochilaceae, by Nick Hodgetts
____8 Colura, by Ron Porley

Publications Several more taxonomic papers are now in production, and the following numbers have been

At least 5 other papers are in draft/nearing completion. The up-to-date list will be held on the TBG WWW pages.

New Members/Change of address

Yelitza León Centro Jardín Botánico, Facultad de Ciencias, Universidad de los Andes, Apartado Postal 52, Mérida 5212, Venezuela. Email: yeltleon@ula.ve

Michelle Price Missouri Botanical Garden, PO Box 299, St. Louis, MISSOURI 63166-0299, USA. Email: price@mobot.org

Robin Walls (address only available to TBG members)

Bryologia Africana

No further information. Contact Bob Magill (mosses) or Tamás Pócs (hepatics) if you are interested in participating (see TBG Membership List for addresses).

Tropical Bryology

Volume 12 (237 pages) has just been published (my copy received 17th October). Contact Jan-Peter Frahm if you wish to become a subscriber.

Other publications

A Handbook of Malesian Mosses. Volume 3. Splachnobryaceae to Leptostomataceae (1996) Alan **Eddy**. 277pp. Published by The Natural History Museum/HMSO, and available from HMSO Publications Centre, PO Box 276, London SW8 5DT, and from HMSO Bookshops, HMSO's accredited agents, and other booksellers. Price £40. This latest of a projected 5 volumes covers 43 genera of the 'acrocarpous diplolepidae' and all species are fully described and illustrated. The high price is unfortunate, but the volume is well worth it. The previous two volumes are still available. Meanwhile, vol. 4 is well under way...

Prodromus Bryologiae Novo-Granatensis (1995) S.P. Churchill & E.L. Linares C. Two volumes totalling around 850 pages. Published by: Museo Historia Natural, Instituto de Ciencias Naturales, Universidad Nacional de Colombia, Santafe de Bogota, Colombia. Families are dealt with alphabetically, with the first volume containing Adelotheciaceae to Funariaceae, the second Grimmiaceae to Trachypodaceae. I have written ordering a copy but have heard nothing yet, so don't know the price. I am not sure whether the scope covers more than Colombia.

Müller's *Synopsis Muscorum Frondosorum* (1849-1851), often of great value when dealing with tropical mosses (as it contains what is often the only description of Müller's mosses, as well as descriptions of all other taxa recognised at the time), is still available in Asher's 1973 reprint. This is a facsimile copy of the 2 volumes (totalling over 1500 pages), together with about 70 pages of additions published in the *Botanische Zeitung* between 1848 and 1851. I recently bought one of several copies in De Slegte bookshop, Kalverstraat 48-52, Amsterdam, Netherlands, (tel: 622 5933), at 95 Dutch Guilders (about £37). The shop appears to be an agent for Asher's reprints, as they also have reprints of other bryological books (e.g. Husnot's *Muscologica Gallica*, Sullivant's *Icones*, Herzog's *Geographie der Moose*). In the past they have also had copies of *Bryologia Europaea*, but not this time. I don't know whether they do mail order, but the two volumes of Müller weigh a massive 2.25 kilograms. Catalogue of the Hepaticae of Sub-Saharan Africa (1996)

Catalogue of the Hepaticae of Sub-Saharan Africa. Wigginton, M.J. & Grolle, R. *Bryophytorum Bibliotheca*50. This will appear later this year.

The Natural History Book Service Ltd. (NHBS), can provide any natural history book, and is at 2-3 Wills Road, Totnes, Devon TQ9 5XN, and will take orders by fax on 01803-865280, by email from nhbs@nhbs.co.uk, and also via their WWW (World Wide Web) site (http://www.nhbs.co.uk). For those with Internet access, the WWW site is extremely useful as it is possible to search through the entire NHBS catalogue by category, so providing they have indexed everything correctly, you should be able to get their full and extensive list of bryological books - and they can be ordered while you are on-line. They are also very helpful on the phone (01803-865913). It is usually cheaper to buy direct from foreign publishers than via NHBS, but it may be a lot easier to let NHBS do it. They will also get any book in print for you, even if it's not in their catalogue.

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

Documents

The following new documents have been produced:
35 - Keys to the Hookeriales of Africa. Translated by Robin Stevenson from Demaret and Potier de la Varde
papers.
36 - Key to African Schoenobryum. Translated by Brian O'Shea from a Bizot & Pócs paper.
37 - Key to African Leucobryaceae. Translated by Robin Stevenson from an Onraedt paper.
38 - Key to African Racomitrium. A translation of a De Sloover key, with additions from keys by Crosby and
others.
39 - Key to African Neckera. Translated by Robin Stevenson from a De Sloover key.

40 -	Generic Key to	African So	ematophyllaceae.	Translated	by Brian	O'Shea	from	Petit's	key.
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All documents are available from the Internet, and will only be sent out to those who request them.

Next Newsletter

It takes quite a long time writing all this stuff, so I would be very grateful for contributions. Please send your contribution on disk if possible, and written using a Windows word processor, or by email. If you have any experience, advice or ideas to share, or you are looking for something to do, get in touch.

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TBG Newsletter 12 - December 1997

Merry Christmas and a happy New Year to all our readers!

This newsletter is long over due, for which I apologise. I have had several attempts at it, and keep rolling on the date several months each time. I hope there won't be such a long wait for the next one.

Contents:

- BBS TBG AGM
- Eustace Jones' West African Flora
- Future TBG expeditions
- A generic flora of sub-Saharan bryophytes
- IBC99 International Botanical Congress, 1999
- Updates on Malawi papers
- Additions to the TBG web site
- New African moss checklist
- Uganda expedition
- News of members
- Mulanje Mt. expedition
- New Members/Change of address
- Tropical Bryology
- Other Publications

Annual General Meeting of the TBG, Chichester, 13 Sept. 1997

Present: D.G. Long (chair & secretary), T.L. Blockeel, A.C. Crundwell, N.G. Hodgetts, R.E. Longton, R.D. Porley, M. Watling.

- 1. Notes of last AGM Approved.
- <u>2. EWJ Tropical African Flora</u> DGL gave a brief update on progress with illustrations which are being handled by M. Wigginton and H. Stieperaere; no completion date for these is known yet.
- 3. Uganda Expeditions

1997 expedition: a brief report was presented by NGH; substantial collections were made along a N-S transect of the west Ugandan forests; important contacts were fostered with Makerere University including the

Scandinavian botanist Kåre Lye. Identification work is now under way. It is hoped to initiate a series of papers on Ugandan bryophytes.

1998 expeditions: Jeff Bates has organised a field course at Kibale Field Station, with A.R. Perry & M.C.F. Proctor collaborating. About 12 students are expected. In July 1998 a further expedition will take place to Ruwenzori with RDP, NGH, J.G. Duckett and Catherine LaFarge-England. This will be the final year of the Darwin funding.

There was some discussion on likely available space in *Journal of Bryology* for another series of African papers; it was proposed that *Tropical Bryology* be considered for some of these.

<u>4. Future TBG Expeditions</u> It was considered realistic to stick with tropical African Bryophytes for the foreseeable future; ACC proposed that Madagascar be avoided until continental Africa is better-worked.

It was proposed that some contribution be made by the TBG on African Bryology at the forthcoming International Botanical Congress in Missouri.

5. African Generic Flora

REL hoped that BBS support could be found for this.

6. Updates

Malawi papers: it was considered desirable to continue these in *Journal of Bryology*.

Specimens: REL reported that about 1000 identified specimens had been returned to RNG; the first set will go to Edinburgh, duplicates (as far as species and locality go) will go elsewhere (MO, Zomba, RNG, Nairobi). A determination list of these is under production.

ACC reported that quite a proportion of 'Dicranaceae' specimens sent to him are Ditrichaceae; REL has the main collection of Ditrichaceae.

- 7. Election of executive: deferred to next meeting.
- 8. Any other business
- M. Watling offered to assist with preliminary sorting and general identifications.
- 9. Place & date of next AGM: Loughborough 1998.

Thanks to David for organising the meeting and providing these notes, in my absence on holiday. I expand below on several items from the AGM.

Eustace Jones' tropical hepatic flora

Martin Wigginton was unable to be at the AGM meeting, but states that after much discussion on what drawings to have, it was finally decided that time (and possible expense) would allow only a few to be included. Since there are good or adequate drawings in accessible literature of most species of West African hepatics, it was decided to include drawings of only about 20 taxa which lack a published drawing or have only an inadequate one. Carefully selected material from Jones' herbarium (E) has been sent to Brussels for drawing, together with

one sample from Stephani's herbarium (G). Drawing is currently in progress, and we hope that the drawings will be ready by Spring. Good progress is also being made on the text editing.

Future TBG expeditions

TBG members are still working on both Malawi and Uganda material, and some will also be involved in the African generic flora (see below), and no future expeditions have so far been planned. However, it is thought that there will be willingness to support an expedition in 1999, and suggestions for this would we welcome. One option would be to go further south, and to do more work in Lesotho and the Drakensbergs, following the two trips some TBG members have already made under the leadership of Jeff Duckett - but other suggestions would be welcome.

A generic flora of sub-Saharan bryophytes

Many of you will be aware of a project to produce a bryophyte guide for the neotropics, which consists of descriptions, illustrations and keys to all families and genera of mosses and liverworts in the neotropics. This document, edited by Steve Churchill (mosses) and Rob Gradstein (hepatics), has now been delivered to the publishers. Such a guide for Africa, where the literature is scarce and scattered, and the state of taxonomy is poor, would be of enormous benefit, and might also act as a framework within which Bryologia Africana work might be channelled. When we examined the text of the neotropical volume, it became clear that both the text and the illustrations could be adapted for Africa, although there will still be about 86 genera and 20 families that are not found in the neotropics. Nevertheless, there are over 390 genera and 85 families in common - although frequently there are very few species in common, often none, and so illustrations may need re-drawing, and descriptions will need to be checked carefully. In order to complete the 'africanised' text in as short a time as possible, it was thought necessary to offer payment for the time that will need to be spent (several hundred days work), and although such a project might seem ideal for the TBG, the funding arrangements would conflict with the BBS' charitable status, at least within its present constitution. As a result, Brian O'Shea and Martin Wigginton have set up a company, Tropical Bryology Research, to manage the project. Brian O'Shea (mosses) and Martin Wigginton (hepatics) will act as editors, and have already made a funding application, with the objective of starting during 1998 and finishing in about two and a half years. As with the neotropical volumes, we will include field trials prior to publication. More details will be provided in the next Newsletter, when we should have more information about progress.

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

IBC99 will have a bryology section, which will involve several seminars. Precisely what they will be has not yet been notified as the cut-off date only just occurred in mid-November, but there will be at least two: Moss Distribution, and Bryophyte Phylogeny. So far as I know, the moss distribution seminar will be organised by Marshall Crosby, and I will be responsible for the African section. It is a couple of months since I have seen the proposed programme, so the precise format remains to be seen.

Updates on Malawi papers

Seven papers have now been published in the Journal, and two more have been accepted for publication:

8 Colura - Ron Porley

Twelve other papers are in progress.

Additions to the BBS TBG World Wide Web site

All TBG documents are now 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:

- * The membership list now shows the names of all members, but only contact details of those who have specifically requested this. 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.)
- * The 1996 TBG progress report has been added (from *BBS Bulletin* **69** (Feb. 97)). The 1989 and 1990 reports are not yet available on-line as the word processor files have gone missing, and the documents have yet to be scanned.
- * The Malawi expedition page has been updated with additional identification progress (shown also in this newsletter), and the list of publications now includes 7, with two more accepted but not yet published. 12 more are listed which still in progress.
- * A Uganda expedition page has been added, and includes accounts of the 1996 and 1997 expeditions, and also a Lesotho page has also been added, with an account of the 1997 expedition.
- * There is a link to the *Tropical Bryology* page, and the cumulative reference list from *TB* is downloadable, although vol. 13 has yet to be added.
- * Documents 42 52 have been added:
- 42 A key to African Leucophanes (Onraedt, 1976) (Translated by Robin Stevenson)
- 43 Papers in the 'East African Bryophytes' series
- 44 Papers and taxa in the 'Huon Peninsula' series
- 45 Key to Rhacocarpaceae of the world (Frahm, 1996) (Translated by Brian O'Shea)
- 46 Key to African Caudalejeunea (Vanden Berghen, 1984) (Translated by Robin Stevenson)
- 47 Key to Regmatodontaceae of the world (Eakin, 1975)
- 48 Key to African Rhachitheciaceae (O'Shea, 1997)
- 49 Key to African Rhizogoniaceae (O'Shea, 1997)
- 50 Papers in the 'BRYOTROP expedition to Mt. Kinabulu, Sabah' series

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* Several new keys have been added (shown above), but also Petit's key to the families and genera of African pleurocarps has at last been added, and has allowed all pleurocarp keys to be integrated into one overall interactive key. Clearly this has limited use without access to adequate documents and books, but I would be pleased to receive any comments.

New African moss checklist

A new version (version 2) has been produced of the Checklist of mosses of sub-Saharan Africa, which is only available as a downloadable file from the TBG web page. This reflects two years worth of changes, and input from 78 new references. The total number of species has gone down from 2939 to 2862, which includes a number of new species to Africa as well as many reductions in synonymy.

If there is anyone who doesn't have access to the web, I can send the file by email (it is a zipped Word 6 file), or on diskette if you send me a blank one. It is a 127 page document. Anyone without access to a computer should write to me to see what can be arranged.

Uganda Expedition

Hypnodontopsis mexicana A paper by Nick Hodgetts and Bernard Goffinet records Nick's 1996 collection in Bwindi Forest of this moss - a new genus and species for Africa. This is a remarkable disjunction from the only other site, in Mexico. Read all about it in a future *J. Bryol*.!

1997 Expedition. An account of the expedition appeared in the July 1997 *BBS Bulletin*. Some people have made good progress with the material collected, but others have made no progress at all, due to other commitments. All individuals are identifying their own material, but a method of centralising the resulting information for publication has not yet been introduced.

1998 Uganda course A course entitled 'Introduction to Bryology and Tropical Cryptogam Ecology' will run from 22 January - 2 February at Kibale National Park including minibus transport from Kampala. All expenses will be paid for successful applicants. The tutors are Jeff Bates, Michael Proctor and Roy Perry. The course will cover the following topics: basic bryophyte ecology, classification, comparisons with ferns and lichens, identification, managing a herbarium, introduction to bryophyte ecology, quantitative studies of contrasted tropical forest communities and habitats, life-forms and micrometeorological studies of the bryophyte microclimate, population dynamics in a patchy environment, biomonitoring with cryptogams. The course is now being targeted at half Ugandan and half Kenyan intake, probably all at postgraduate or above level (managers, university teachers and technicians etc.). We are limiting it to 10 from each country but have been warned that we will probably only get about 5 in each country. Return bus fare, Nairobi-Kampala, will be met for Kenyan applicants. Prof. Pomeroy is advertising it at Makerere and Leon Bennun of TBA in Nairobi. Any additional applicants should send a one-page CV to the organiser in the respective country, or failing that, to Jeff Bates.

1998 Expedition to the Rwenzoris

Details as in the AGM notes above.

Uganda Checklist Kåre Lye, who joined us in Uganda during the 1997 expedition, has already made a detailed list of collections of Ugandan mosses and hepatics, including all those in BM, to which have been added all taxa with published collections for Uganda. I have draft copies of these documents, but the information really needs condensing into something like dot maps with an narrative per taxon. It is thought that this will be delayed until the current expedition material has been identified, as this will add quite a number of species to the list.

Expedition by Tamás Pócs and Kåre Lye to Uganda, September, 1997

Tamás Pócs writes: We visited Bugala Island in Ssese archipelago, the swamp forests at the W edge of Lake Victoria in Rakai District, Sezibwa Falls and a small part of Mabira F.R., Itohya and Bugoma forests in Hoima (former Bunyoro) Distr., riverine forests along Nkusi River in Kibale Distr., open woodland along the Fort Portal - Bundibugyo road, Semuliki National Park, the northernmost tip of Kibale F.R. travelling through it and other roadside localities, Mount Elgon near Sipi Falls and along the Sasa Trail up to the caldera rim (up to 3800 m alt., richest at 2800 m), the Tororo rock (there were no bryophytes), Lake Bunyoni and Ichuya Forest Res. in Kabale and Kisoro District, finally a swamp forest near Kyabadaaza village in Mpigi District. We collected many bryophytes new to Uganda, or rare. [BJO: there was very little overlap between this and the TBG expeditions, and we hope a much clearer picture of Uganda's bryophyte flora will appear as a result.]

News of members

Len Ellis was in Sabah (Borneo) for 3 weeks in August/September 1997 at the Danum Valley Field Centre, performing a bryophyte inventory, and collaborating with Pat Wolsley in comparing the cryptogam flora in logged and unlogged forest.

Angie Newton is now continuing her work on neotropical Pterobryaceae and moss phylogeny in Mexico (see change of addresses).

Michelle Price is continuing her PhD studies at Missouri Botanic garden, on neotropical *Holomitrium*.

Malcolm Watling has volunteered to help with the identification of Malawi specimens, and is now identifying around 150 Hypnaceae down to genus.

Brian O'Shea and **Elinor Wiltshire** are continuing their studies of A.H. Norkett's Seychelles collections in BM by producing a handbook of the mosses of Seychelles.

Mulanje Mt. Expedition

Identification The current position on the Malawi collections is shown in the following table:

Mosses

Total Sent Ident Taxa New

Andreaeaceae	28	28	28	4	4
Anomodontaceae	5				
Archidiaceae	2	2	2	2	2
Bartramiaceae	89	89			
Brachytheciaceae	35	30	15	7	6
Bryaceae	120	120	5	2	0
Calymperaceae	117	117	110	10	6
Cryphaeaceae	9	9			
Daltoniaceae	25				
Dicranaceae: other	69	69			
Dicranaceae: Campylopus etc.	336	273	273	25	11
Dicranaceae: Leucoloma/Dicranoloma	177	177			
Ditrichaceae	30	30			
Entodontaceae	6	6			
Erpodiaceae	9	9	9	4	4
Fabroniaceae	4	4	4	3	1
Fissidentaceae	251	247	182	16	13
Funariaceae	47	16			
Grimmiaceae	30	27	20	4	4
Hedwigiaceae	30	18			
Hookeriaceae	58	58			
Hypnaceae	151				
Hypopterygiaceae	37	37			
Leptodontaceae	8	8			
Leskeaceae	1	1			
Leucobryaceae	81	80			
Leucodontacaeae	12	12			
Meteoriaceae	130	130	130	8	1
Mniaceae	22	22	22	1	0
Neckeraceae	160	160	160	7	4
Orthotrichaceae	47	47	2	1	0
Polytrichaceae	65	65			
Pottiaceae	179	179	58	9	5
Pterobryaceae	22	22	6	2	1
Racopilaceae	57	18			
Regmatodontaceae	6	6	6	1	0
Rhachitheciaceae	1	1	1	1	0
Rhacocarpaceae	43	43	43	1	0
Rhizogoniaceae	20	20	20	1	0
Rigodiaceae	19	16	16	1	0
Sematophyllaceae	227	103			
Sphagnaceae	80	80	80	4	0
Splachnaceae	10	6	5	1	0
Thuidiaceae	127	79	64	5	1
Trachypodaceae	31	31	19	2	0

Mosses total 30	012 2495 128	0 122 63
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Hepatics	Total	Sent	Ident.	Taxa	New
Acrobolbaceae	6	6	6	2	2
Adelanthaceae	7	7	7	2	1
Allisoniaceae	1	1	1	1	0
Aneuraceae	16	16	1	1	1
Anthocerotaceae	2	2	2	1	0
Arnelliaceae	7	7	7	2	1
Aytoniaceae	9	9	9	2	1
Balantiopsidaceae	5	5	5	1	1
Calypogeiaceae	45	39			
Cephaloziaceae	14	14	12	5	4
Cephaloziellaceae	18	18	14	4	3
Codoniaceae	9	9			
Frullaniaceae	190	190	117	17	9
Geocalycaceae	79	79	27	9	2
Gymnomitriaceae	2	2	2	1	1
Herbertaceae	64	64			
Jungermanniaceae	174	174	52	11	7
Lejeuneaceae	221	221	113	48	28
Lejeuneaceae: Colura	44	24	24	5	4
Lepidoziaceae	227	227	224	9	3
Lunulariaceae	1	1			
Marchantiaceae	1	1	1	1	0
Metgeriaceae	51	51	28	6	5
Pallavicianiaceae	93	85	85	5	1
Plagiochilaceae	293	293	89	18	8
Porellaceae	29	29	29	3	3
Radulaceae	158	158	151	9	7
Ricciaceae	1	1	1	1	1
Schistochilaceae	28	28	28	2	0
Targioniaceae	1	1	1	1	0
Wiesnerellaceae	3	1	1	1	0
Hepatics total	1799	1763	1037	168	93
Grand total	4811	4258	2317	290	156

The percentage of taxa new to the known flora of Malawi is 54%.

New Members/Change of address

Angie Newton (change of address)

Malcolm Watling (new member)

Daniel Wrench (new member)

(Addresses of members are not published in this on-line version of the Newsletter, although they are available to all members.)

Tropical Bryology

Volume 13 (183 pages) was published on 1 July 1997. Contact Jan-Peter Frahm if you wish to become a subscriber.

Other publications

Catalogue of the Hepaticae of Sub-Saharan Africa (1996) Wigginton, M.J. & Grolle, R. *Bryophytorum Bibliotheca* **50**. Price DM60 (about £21).

This book, complementing Grolle's earlier catalogue of the hepatics of the East African islands, was published in late 1996. It contains a list of all species accepted for sub-Saharan Africa (excluding the East African islands) (i.e. Africa 2 and the mainland part of Africa 4), with all known synonyms, and the distribution by country. There are 39 species and sub-taxa listed in Anthocerotae, and 706 species and sub-taxa of Hepaticae. Essential.

Flora of the Guianas, Series C: Bryophytes, Musci III [continuation of Flora of Suriname VI(I) Musci II] (1996) Florschütz-de Waard, J., Veling, K. & Zielman, H.R. Publ.: Royal Botanic Gardens, Kew, Richmond, Surrey, TW9 3AB, UK. Price: £26.95

This is the third part of Florschütz-de Waard's excellent bryophyte flora of Suriname, and includes all Guianan species in the Leucomiaceae, Thuidiaceae, Sematophyllaceae and Hypnaceae - and concludes with a key to the genera of the mosses of the Guianas. There will be a fourth volume for new additions to the flora. This volume is very much in the style of previous volumes, but with a little more structure to the text and more space for the illustrations. Kew's plasticised limp covers seem a little more robust than the previous paper covers, but this is still a slim volume for such a high price. The whole now amounts to 490 pages - a remarkable achievement.

Flora of Southern Africa. Bryophyta. Part 1. Mosses: Fascicle 3 - Erpodiaceae to Hookeriaceae. Publ.: Botanical Research Institute, Department of Agriculture and Fisheries, Private Bag X144, Pretoria 0001, Republic of South Africa.

Jacques van Rooy of the Botanical Research Institute (and author of the Orthotrichaceae section in this volume) reports that the volume is due to be published this month (December) or next. We have been using a typescript copy since 1990 for our African material, so a published copy with illustrations will be a great relief! Well worth buying when it is available, as it should be quite cheap, along with the previous two volumes.

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

The latest catalogue for the Natural History Book Service says that this book is now available, for £27.50. I have seen no announcement from MBG, but will investigate further. (Note added post publication of this Newsletter: the volume is still being worked on, and will probably be another year before publication.)

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

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TBG Newsletter 13 - August 1998

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- BBS TBG AGM
- Eustace Jones' West African Flora
- Future TBG expeditions
- A generic flora of sub-Saharan bryophytes
- Updates on Malawi papers
- IBC99 International Botanical Congress, 1999
- Uganda expeditions
- Additions to the web site
- News of members/New Members/Change of address
- Helsinki tropical bryology course and workshop
- Tropical Bryology
- Other Publications

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.ibc99.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 afromontane forest types including *Olea africana* forest, *Podocarpus* forest, *Hagenia abyssinica - Rapanea melanophloess* 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 *Leptodontiopsis*. 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:
 - o 53- Key to African Hypnaceae (Petit, 1978)
 - 54 Uganda taxonomic/distribution publications
 - 55 *Uganda taxonomic responsibilities*
 - o 56 Papers in the series 'BBS Expedition to Mulanje Mountain, Malawi'
 - o 57 Processing of Uganda bryophyte collections
 - 58 *Processing of Malawi bryophyte collections*
 - o 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 Pulao 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 Vá× a. 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

Published by: British Bryological Society Tropical Bryology Group

TBG Newsletter 14 - August 1999

Contents:

- Editorial
- BBS TBG AGM
- Eustace Jones' West African Flora
- Alan Eddy's *Malesian Mosses*
- Future TBG expeditions
- Guide to bryophytes of sub-Saharan Africa
- Tropical Bryology Research internet homepage
- Tropical Bryology at IBC99 International Botanical Congress 1999, St Louis, Missouri, 1-7 August 1999
- Mosses and Liverworts of Uganda
- African moss checklist to be available as searchable database
- Updates on Malawi papers
- Uganda expedition
- Additions to the BBS TBG web site
- News of members/New Members/Change of address
- Tropical Bryology
- Other Publications

Alan Eddy. We lost the BBS's premier tropical specialist during the year, after a lengthy battle with cancer. He was working on vol. 4 of his Malesian Mosses until very near the end, and you will be pleased to hear that staff in the Natural History Museum Botany Department are intent on completing the rest of the flora in his memory. (See below for more details.)

This has been a particularly busy year for me as well as many others in the TBG - quite constructive but not very productive. The TBG seems to develop in a fairly random manner: we are all very busy, but it seems to be difficult to plan one's year in too much detail. All the more reason to attend our AGM and try to lick the TBG into shape.

Brian O'Shea, 24 August, 1999

TBG Annual General Meeting

The AGM of the TBG will be at Manchester on 11th Sept. 1999, following the main BBS AGM.

AGENDA

- Notes of last AGM
- 2. EWJ Tropical African hepatic flora
- 3. Uganda Expeditions & bryophyte flora
- 4. Future TBG Expeditions
- 5. African Generic Flora (GBA)
- 6. Malawi update
- 7. Election of executive

- 8. Any other business
- 9. Place & date of next AGM: Sept 2000, following BBS AGM

BBS TBG AGM

19 September 1998, Loughborough

Notes of Meeting

Present: Tom Blockeel, Alan Crundwell, Jeff Duckett, Nick Hodgetts, Angie Newton, Brian O'Shea (chair & notes), Roy Perry, Ron Porley, Robin Stevenson, Martin Wigginton.

Apologies: Liz Kungu.

- 1. **Notes of last AGM** (see Newsletter 12). Malcolm McFarlane attended the meeting but was not listed amongst the attendees. Otherwise accepted.
- 2. **Eustace Jones tropical African hepatic flora** 20 drawings of high quality have now been completed at no charge by a staff artist at Meise, Belgium, but the BBS Publications Committee have strongly recommended that all represented genera should be illustrated in the book (and not only those covered by the 20 plates already done), and ways were being investigated of producing the further 50 drawings required. Because no-one was prepared to take on this very considerable extra work on a purely voluntary basis, some costings had been done and funding possibilities investigated. Martin Wigginton reported that Malcolm Watling had agreed to prepare the 50 plates, and following a recommendation by Jeff Duckett, an application had been made to the New Phytologist Trust for a grant to support this work. At the meeting, Jeff indicated that it was unlikely the full cost would be found from that source, and suggested that matching funding should be sought from the BBS. **Action: David Long to discuss BBS funding with Giles Clark**. It was considered important that agreement in principle is given to this by the BBS Executive, and by the appropriate fund trustees, as work will need to start in the next few weeks. Work is expected to take another year. David Long will not complete the revision of the text until nearer the publication date. David stated that publishing costs have not yet been considered by RBGE, who might be interested in publishing the book.
- 3. **Uganda Expeditions** The collections from this year's expedition are still held at Makerere University, and negotiations continue to get them released. Jeff Duckett is awaiting a letter from DoE to support removal from Uganda. Ron Porley is also pursuing this via Prof. Pomeroy at Makerere who is organising things from the Ugandan end.

It was the intention to send a batch of identified collections again to Makerere this year. Samples of all the taxa so far discovered new to the country (in a list about to be published) would be included if possible. **Action:**Martin Wigginton (hepatics) and Brian O'Shea (mosses) to organise specimens for despatch. Nick Hodgetts will provide a list of specimens already sent. Copies of papers would also be sent as published.

A book titled 'Mosses and Liverworts of Uganda' was planned, but writing would not start for another 3 years, until most of the Uganda material was identified. The book would be a co-operative project with many authors. Jeff Bates was responsible for this project, and the editorial board would also include Nick Hodgetts and Brian O'Shea.

4. **Future TBG expeditions** There have been several enquiries and requests about future TBG expeditions. Amongst possibilities suggested at the meeting were Rwenzori mountains (to complete the Uganda project), and Malawi (to complete Mt. Mulanje and also to look elsewhere in the country). In a general discussion about the

topic, the view was expressed that we should have a reason behind our choice - not just select somewhere almost by accident, or because it sounds like a good place to go. This could either be a theme such as afromontane vegetation, or montane forests, or perhaps to focus on the area of greatest need (e.g. where recorded bryophyte diversity was lowest). It was also felt that we might make a more positive contribution by providing the bryophyte component of other projects, such as those run from Kew or Missouri Botanical Garden, or supported by the British Council.

The general feeling seemed to be that we should attempt to complete existing projects in Malawi and Uganda, and then to cooperate with others, for instance where phanerogamic surveys were being undertaken. Action: Jeff Duckett would find out British Council's current interests, and Brian O'Shea would pursue with Kew and Missouri. Brian O'Shea is already in contact with an Oxford University project compiling a checklist for Mount Mulanje.

It was also seen as important to encourage new participants to these expeditions, although it was realised that not everyone had the time to go on expeditions, nor to do the follow up work afterwards.

- 5. **African generic flora.** A guide to the families and genera of sub-Saharan African bryophytes is the target of a project for which Brian O'Shea and Martin Wigginton have applied for funds (but not under the name of the TBG because of problems that some members of Council have highlighted over their commitments as trustees). An application was made last year, but failed due to insufficient attention being given to the proposed workshops in Africa to 'dry run' the guide. This year they have made agreements in Cameroon, Uganda and South Africa for week-long workshops from late 2000 to early 2001. It is hoped that these contacts will be fruitful when deciding on new TBG projects.
- 6. **Updates Malawi.** Due to shortage of time, this item was omitted.
- 7. **Election of executive**. The present executive will continue.
- 8. Any other business.
- 8.1 David Long suggested that we should consider how to pursue closer links with potential bryologists in Africa, for instance by helping to finance further education, or by seeking funding for microscopes etc. There was no time to pursue this further at the AGM, so: **Action: Brian O'Shea to discuss with David Long**.
- 8.2 David Long suggested that the TBG should provide a poster for the International Botanical Congress (August 1999), as several members would be there. **Action: Angie Newton agreed to investigate how such a poster could be produced.**
- 9. Place and date of next AGM: Manchester, 11th September 1999.

Brian O'Shea 30 September 1998

Action points

- 1. David Long to discuss BBS funding for EWJ hepatic flora with Giles Clark.
- 2. Martin Wigginton (hepatics) and Brian O'Shea (mosses) to organise specimens for despatch to Uganda.
- 3. Nick Hodgetts to provide a list of specimens already sent to Uganda.

- 4. Jeff Duckett to find out British Council's current interests in Africa.
- 5. Brian O'Shea would talk to Kew and Missouri about current expeditions to Africa.
- 6. Brian O'Shea to discuss funding for African students with David Long.
- 7. Angie Newton to investigate how a poster could be produced for IBC 99.

Eustace Jones' tropical hepatic flora

Some further progress has been made in editing the text, and it is hoped this will be more or less complete by the end of the year. In contrast there has been dismally little positive progress on drawings. The application to the New Phytologist Trust for a grant was unsuccessful. Financial support for the work on drawings was discussed by the BBS Executive, and later by the BBS Publications Committee, but neither considered that BBS funds should be used for this work. No further drawings have been prepared.

Alan Eddy's *Malesian Mosses*

When Alan Eddy died, volume 4 of his *Malesian Mosses*, which covers the Leucodontales, was well under way, and he was working on it almost to the end. Most of the species descriptions and illustrations are done, with mainly family and genus descriptions and keys still to do. Angie Newton is now coordinating work on completing the flora, on behalf of the BM Botany Department, which is giving the project its full support. She and Len Ellis will complete volume 4 over the next three to five years, fitting it in with current work schedules. The rest of the flora will probably be split into two volumes, covering the Hookeriales and Hypnales. Ben Tan has agreed to play the major role in coordinating this activity, with other Asian specialists, and with continuing contribution from BM. Getting the work started will take some time because of existing commitments, but is good to hear that this outstanding flora is to be completed.

Future TBG expeditions

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

Guide to bryophytes of sub-Saharan Africa (GBA)

Although this project is not officially part of BBS TBG activity, almost all participants belong to the TBG, and it fits well within the objectives of TBG. Our application to the Darwin Initiative for funding of the project was again unsuccessful, despite remedying all the areas mentioned following last year's application. This time the problem was said to be that we had insufficient contribution from Africans, although again they were complimentary about the quality of the application. We were rather annoyed at their suggestion, as we had pointed out in the application that there were very few bryologists in Africa because there was no accessible literature available for identifying bryophytes, and one objective of our project was to help remedy this. We decided to continue without funding for the first stage of the project (producing the generic flora), and to seek further funding for the workshops to test out the flora, although we have already made preliminary bookings for workshops in Cameroon, Uganda and South Africa.

The project is being managed by Brian O'Shea and Martin Wigginton, who have set up a company called

Tropical Bryology Research through which to seek funding. We have now started, and the first family treatments are starting to trickle through - although there are about 127 families with 489 genera to complete by next June. Details of the project are covered on the Tropical Bryology Research www home page (see below). This includes an introduction to the project, instructions to authors, a sample family treatment, and details of who is covering which families. Only a relatively few families of both mosses and hepatics are still to be allocated to authors. Martin Wigginton and I will review the position during August and try to confirm completion dates with authors. Our most pressing problem is now seeking funding for the workshops to test the keys and text in the field.

Although the list of authors is not yet complete, 19 of the 20 authors so far recruited are BBS members - although one of them is not (yet) a member of the TBG.

Tropical Bryology Research - internet homepage

As mentioned in previous Newsletters, our funding applications are being made in the name of Tropical Bryology Research (TBR). There is now a TBR home page on:

http://www.oshea.demon.co.uk/tbr.htm

This describes what TBR is, and also has a Guide to bryophytes of Africa (GBA) page and African moss diversity & endemism data.

Tropical Bryology at IBC99 - International Botanical Congress 1999, St Louis, Missouri, 1-7 August 1999

This was my first visit to an IBC and the sheer numbers of people involved was quite overwhelming - over 4500 were registered. Timetabling of symposia meant that it was not always possible to see all the sessions one might like, but at least all the bryological sessions were possible. Phylogeny and molecular studies seemed to permeate most sessions, in all plant groups, but particularly in the lower plants. There were seven symposia concerned wholly or in part with bryophytes, but the two of perhaps the greatest interest to tropical bryology were those on bryophyte and lichen rarity (organised by Dale Vitt and associates), and on moss diversity (organised by Steve Churchill and myself).

The former set out to define just how rarity should be measured and how conservation activity should be used to preserve rare bryophytes. Research by Dale Vitt and associates confirmed/concluded that most mosses are rare, and that very few species are common (not necessarily true of flowering plants), and that diversity was best maintained by conserving mesohabitats (e.g. river valley with cliffs) that have many microhabitats. In Canada, cliffs and alpine habitats supported more than half the diversity. If preserving diverse sites is the best way of conserving both diversity and rare plants, this might indicate that we should be targeting tropical hot spots as a priority, rather than working on whole country floras.

The moss diversity symposium looked in some detail at the diversity of the tropics in America, Africa and Asia/Oceania. This will be published, but the deadline for papers is not until January 2000. I am now maintaining the African moss diversity data on the Tropical Bryology Research home page (see above), listing all countries with the number of mosses and endemics.

Under the editorship of Jeff Bates, *Mosses and Liverworts of Uganda* will cover the approximately 800 species of bryophytes in Uganda. Authors for most genera have now been agreed, and instructions to authors have been sent out. The timetable of the book allows another year for Uganda specimens to be identified at least to family, and by then, these should have been sent to coordinators. (The list of coordinators for Uganda collections was published last year and appears on the BBS web site, and authors have been told who these are.) Coordinators will then deal directly with authors. Unidentified specimens from BM are also being made available, and in particular, details of most of Francis Rose's 1200+ Uganda collections have now been entered on a computer at BM and are indexed by family, where this is indicated on the packet. A significant number (perhaps a third) still have no identification to family, so anyone wanting to help with this task should contact Brian O'Shea. It is expected that the work of writing and illustrating will take two years to complete.

African moss checklist to be available as searchable database

Efforts are now being made to set up a database on the BBS web site at RBGE to support an on-line checklist for African bryophytes. Initially, the moss data will be extracted from Brian O'Shea's TAXA system, where the data is maintained, and will be sent periodically to Edinburgh to update the on-line database. At the time of writing the facilities to be made available are not finalised, but we hope that it will be possible to query at least on country or taxon, and that all distribution data will be supported by literature references. Synonyms will also be loaded. In the future it is hoped also that the hepatics data can be loaded.

Updates on Malawi papers

Nine papers in the Malawi series have now been published in *J. Bryol.*, and three further ones have been accepted:

- * Lepidoziaceae (Hepaticae) [Hodgetts and Pocs]
- * Pterigynandraceae M.Fleisch. and Rigodiaceae H.A.Crum (Bryopsida) in Africa [O'Shea]
- * A revision of the genus Rhacopilopsis Renauld & Cardot (Hypnaceae, Bryopsida) [Watling & O'Shea]

Papers on Andreaeaceae, Thuidiaceae, Grimmiaceae and Calymperaceae are well advanced.

Uganda Expedition

Collections The collections from the 1998 expedition to Mt. Elgon were finally released from Uganda, and are now with Ron, Howard and Jeff (in UK) and Catherine (in Canada). We are specially grateful to Prof. Pomeroy of Makerere University for his invaluable help in this matter.

Publications The four publications mentioned in the last newsletter are now published, and the list is being maintained on the TBG web page; apart from the first paper, all the rest are in the 'Bryophytes of Uganda', series, published in *Tropical Bryology*:

Hodgetts & Goffinet: Hypnodontopsis (Thér.) H.Rob., a genus and species new to Africa

- 1. Wigginton, Porley and Hodgetts: BBS Tropical Bryology Group expeditions, 1996-1998. Introduction and collecting sites
- 2. Porley, O'Shea, Wigginton, Matcham, Hodgetts and Stevenson: New and interesting records

3. O'Shea: *Phyllodon truncatulus* (Müll. Hal.) W.R.Buck is replaced in Africa by *Phyllodon truncatus* (Welw. & Duby) W.R.Buck (Hypnaceae, Bryopsida)

A second paper of new and interesting 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.htm

The following additions have been made to the web site:

- * Separate sub-menu for African publications created
- * Malawi and Uganda publications lists updated
- * TBG members list updated
- * Link to GBA page added
- * Documents 60 61 added:

60 - African bryophytes - diversity and endemism 61 - Newsletter 14

News of members

Brian O'Shea visited the SW Cape area of South Africa in April, and collected with a permit from the Kirstenbosch Botanical Garden estate, which also covers part of Table Mountain. He also collected with **Ryszard Ochyra** on Table Mountain, who was visiting on his way to sub-Antarctic Marion Island.

Ryszard Ochyra is now working on an *Illustrated Moss flora of Antarctica* (IMFA), which is scheduled to be finished later this year, after which he hopes to be able to return to looking at some tropical bryophytes again (including working on the GBA) - before he starts on the sub-Antarctic islands.

Fourteen TBG members were present at the International Botanical Congress in St Louis.

Zach Magombo and **Michelle Price** are both in process of revising tropical genera at Missouri Botanical Garden (MBG): Zach *Floribundaria* (Meteoriaceae) and Michelle *Rhynchostegiopsis* (Leucomiaceae). **Chris Casado** (not a BBS member) also at MBG is revising *Streptopogon* (Pottiaceae), and will be looking at some of our Uganda material.

New members/Change of address

Benny Bytebier, Coordinator, Taita Hills Biodiversity Project, Centre for Biodiversity, National Museums of Kenya, P.O. Box 40658, Nairobi, KENYA. Tel: +254 2 2 742445; Home: +254 2 882571/4 ext. 227; Fax: +254 2 744 833/741049/741424. Email: bytebier@africaonline.co.ke; WWW: http://www.museums.or.ke

Michael Proctor, Hatherley Laboratories, The University, Prince of Wales Road, Exeter, EX4 4PS, UK

Tropical Bryology

Volumes 15 (195 pages) and 16 (214 pages) were published on 15 December 1998, and 1 July 1999. Volume 16 celebrated the 10th anniversary of the journal, and also announced regional editors to take some of the load from Bill Buck and Jan-Peter Frahm. Send your contributions to: Ben Tan (contributions concerning tropical Asia), Bill Buck (neotropics, written in English), Claudio Delgadillo (neotropics, in Spanish), Brian O'Shea (tropical Africa). Contact Jan-Peter Frahm if you wish to become a subscriber to this comparatively cheap journal (around £10 per volume, half this price if you live in a tropical country).

Volume 17 will be published later this year.

Other publications

Not yet published:

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

Bruce Allen says that part 2 is now complete, and that (unlike part 1) all taxa are illustrated - which should make this a very useful book. He hopes it will be out by the end of the year.

Gradstein, R. and Churchill, S. Guide to bryophytes of the neotropics. Publ.: New York Botanical Garden

This is reputed to be at the stage of final copy editing and is scheduled for publication by the end of this year.

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

Published by: British Bryological Society Tropical Bryology Group

TBG Newsletter 15 - August 2000

Contents:

- Editorial
- BBS TBG AGM
- Eustace Jones' West African Flora
- Alan Eddy's Malesian Mosses
- Future TBG expeditions
- Guide to bryophytes of sub-Saharan Africa (GBA)
- Mosses and Liverworts of Uganda
- African moss checklist to be available as searchable database
- Malawi expedition
- <u>Uganda expedition</u>
- Additions to the BBS TBG web site
- News of members/New Members/Change of address
- Tropical Bryology
- Other Publications

Another fairly quiet year on the surface, but a good deal of progress in the background. Read all about it, and turn up for the TBG AGM on 9th September.

Brian O'Shea, 22 August, 2000

TBG Annual General Meeting

The AGM of the TBG will be at Manchester on 9th Sept. 2000, following the main BBS AGM.

AGENDA

- 1. Notes of last AGM
- 2. EWJ Tropical African hepatic flora
- 3. Uganda Expeditions & bryophyte flora
- 4. African Generic Flora (GBA)
- 5. Malawi update
- 6. Future TBG expeditions
- 7. Election of executive
- 8. Any other business
- 9. Place & date of next AGM: Sept 2001, following BBS AGM

BBS TBG AGM

11 September 1999, Manchester

Notes of Meeting

Present: Tom Blockeel, Jeff Duckett, Len Ellis, Nick Hodgetts, Howard Matcham, Angie Newton, Brian O'Shea (chair & notes), Ron Porley, Michael Proctor.

Apologies: Robin Stevenson, Martin Wigginton.

1. Notes of last AGM (see Newsletter 14). Accepted.

Action points from previous meeting:

- **AP 1. David Long to discuss BBS funding for EWJ hepatic flora with Giles Clark**. An account of events since the previous meeting had appeared in *Newsletter 14*: neither New Phytologist Trust nor the BBS had felt able to subsidise this venture. See Agenda item 2 below.
- AP 2. Martin Wigginton (hepatics) and Brian O'Shea (mosses) to organise specimens for despatch to Uganda.
- AP 3. Nick Hodgetts to provide a list of specimens already sent to Uganda.

Action Points 2 & 3 were taken together. No record had been kept of specimens already taken to Makerere, but all were duplicates. For the time being it was convenient to hold back specimens until work on the Ugandan flora had been completed.

- **AP 4. Jeff Duckett to find out British Council's current interests in Africa.** Done. See agenda item 6 below (Future expeditions).
- **AP 5. Brian O'Shea would talk to Kew and Missouri about current expeditions to Africa.** Done. See agenda item 6 below (Future expeditions).
- **AP 6. Brian O'Shea to discuss funding for African students with David Long.** Not yet done, and David was currently away in Bhutan. However, Jeff Duckett suggested that the Stansfield Fund of the Linnean Society be investigated, which was interested in providing funding for African students to do work in Africa.
- **AP 7. Angie Newton to investigate how a poster could be produced for IBC 99.** Although Brian O'Shea had submitted an abstract for the poster, he had not found time to gather together the appropriate information.
- 2. **Eustace Jones tropical African hepatic flora** As no funding had been found (see last AGM's AP 1 above), almost no action had been taken for the last year. David Long was considering an offer to publish in the *Bryophytorum Bibliotheca* series. The general feeling expressed was that this was probably the easiest solution, but also the most expensive for purchasers: a more affordable solution was preferred. Additional illustrations from existing publications was considered acceptable. David Long and Martin Wigginton were asked to continue with efforts at publication.
- 3. **Uganda Expeditions** All collections have now been received from Uganda, and Professor Pomeroy was thanked for his assistance in this. To support the 'Mosses and Liverworts of Uganda' book, a deadline had been set of autumn 2000 for completion of identification of all specimens to family level. Specimens would then be distributed to family coordinators, who would in turn supply the appropriate authors.

The first 3 papers on the Uganda collections had been published in *Tropical Bryology* (see *Newsletter 14*). The next 'new and interesting bryophytes' paper was under way, and additional taxa (plus comments) should be sent to Brian O'Shea (mosses) or Martin Wigginton (hepatics). It was felt that the pace of identification had reduced somewhat after the initial burst of effort, but was likely to pick up over the next year in preparation for the bryophyte flora.

4. **Future TBG expeditions** In response to AP 4 from the last AGM, Jeff Duckett mentioned that the British Council supports links between institutions in the UK and abroad, for instance between UK and Africa, where

each receive reciprocal benefit, and QMW (London) and Kenyatta University (Kenya) now have such an arrangement, covering a range of disciplines, for a five year period. He suggested that he investigate trips involving TBG members, probably three trips of two people or two of three: flights and accommodation would be provided for a three week trip. This suggestion received general support and he was asked to pursue this possibility.

Brian O'Shea had contacted Kew in relation to their work in Cameroon. At present they were making trips annually, in October/November, and groups of researchers were arriving every two weeks for a two week stay, so the same transport would deliver the previous set of researchers back to Limbe and pick up the next. There would be no funding for flights, but it was thought the Royal Society may be an appropriate source of grants to cover the flights. He was asked to get more details for the 2000 trip. MBG had people working in Africa (particularly in Gabon), but were not organising expeditions.

In addition to these two options, a further trip to Malawi might be a possibility, perhaps to look at the north of the country (e.g. Nyika Plateau). Zach Magombo expects to return to Zomba on completion of his PhD after summer 2000 and would be keen to be involved.

A trip to Rwenzori to complete the Uganda survey cannot be considered at present because of continuing troubles in the area.

- 5. **African generic flora.** Progress on this project had been covered in *Newsletter 14*. Good progress continues to be made, particularly on hepatics, and only a few small moss families were still unallocated to authors. Only a small proportion of authors had so far started their work. Finding illustrators willing to work for free may become a problem.
- 6. **Malawi update.** Three more papers are in press (listed in *Newsletter 14*) but much of the work completed has yet to be published, mainly due to overworked 'experts'. The position on distribution of specimens to herbaria was raised, and **Brian O'Shea was asked to contact Royce Longton to determine the position**. The status of Malawi *Sphagnum*after Alan Eddy's death was also raised. Brian O'Shea explained that there was a computer file of Alan's listing all the Malawi specimens and some with identifications, but only about half of the specimens have so far been found and often with different names to those on the computer file. In addition, the names given suggest that some taxonomic work was planned, so a *Sphagnum* expert will be needed to work this through. Brian O'Shea and Len Ellis will continue to search for the missing specimens as Alan's belongings are put into order.
- 7. **Election of executive**. Although it was pointed out that the TBG Executive had again not found it necessary to meet, it was nevertheless thought necessary that a new executive be elected. The following were proposed and elected: Coordinator: Brian O'Shea; other Executive members: Nick Hodgetts, David Long, Angie Newton, Martin Wigginton.

8. Any other business.

- 8.1 Alan Eddy's Malesian Mosses. In answer to a question, Angie Newton explained that it would be difficult to make much time for this in the current year because of other commitments, but that the first task would be to make a precise inventory of what was available (both text and illustrations) and work out which taxa were still to be dealt with for volume 4. Ben Tan had agreed to take on the final two volumes, but he too would not be able to start for some time.
- 9. Place and date of next AGM: Reading, 9th September 2000 (provisional date).

Action Point:

Brian O'Shea was asked to contact Royce Longton to determine the position regarding distribution of Malawi specimens.

Eustace Jones' tropical hepatic flora

No progress has been made this year due to pressure of other work.

Alan Eddy's *Malesian Mosses*

I reported last year that when Alan Eddy died, volume 4 of his *Malesian Mosses*, which covers the Leucodontales, was well under way. Many of the species descriptions and illustrations were done, with mainly family and genus descriptions and keys still to do. Angie Newton is now to co-ordinate work on completing the flora, on behalf of the BM Botany Department, which is giving the project positive support. She and Len Ellis will complete volume 4 over the next three to five years: both have already committed work loads that prevent any more rapid progress. The rest of the flora will probably be split into two volumes, covering the Hookeriales and Hypnales. Ben Tan has agreed to play the major role in coordinating this activity, with other Asian specialists, and with continuing contribution from BM. Good progress is being made in ensuring that funding is available for Ben to visit BM for several months to work on Alan's collections.

Future TBG expeditions

Although a number of possibilities have been considered (see last year's AGM minutes), no future expeditions have been decided on.

Guide to bryophytes of sub-Saharan Africa (GBA)

This non-BBS TBG activity involves many TBG members, and is now well under way. Following our failure to get a grant last year, we tried again with a much scaled down application, covering only the workshops in Cameroon, Uganda and South Africa, and subsequent free distribution of the guide, but again were unsuccessful. We have now cancelled the workshops, but may apply again to fund the free distribution of the guide following publication.

As most of you will be aware, the project is being managed by Brian O'Shea and Martin Wigginton, via Tropical Bryology Research (TBR). Work is now well under way and at the time of writing, approximately 64% of family treatments and 26% of genus treatments are with the editors, but not all are yet illustrated. There are about 125 families with 492 genera to complete and details of progress are periodically added to the Tropical Bryology Research www home page:

http://www.oshea.demon.co.uk/tbr.htm

The web site includes an introduction to the project, instructions to authors, a sample family treatment, details of all the families and genera to be treated, and who will be treating each family. A number of family treatments have also been added to the site.

As well as the GBA information, the TBR web site also describes what TBR is, includes version 3 of the sub-Saharan African moss checklist (available for downloading), and African moss diversity & endemism data.

Mosses and Liverworts of Uganda

Work is due to start shortly on this book: we hope for an update at the AGM.

African moss checklist to be available as searchable database

Although reasonable progress has been made in writing an extract program from TAXA to allow data to be uploaded to the BBS web site at RBGE, lack of time has prevented further input from either party.

Malawi expedition

Two more papers in the Malawi series have now been published in *Journal of Bryology*:

- **10**. Lepidoziaceae (Hepaticae) [Hodgetts and Pocs]
- **11**. Pterigynandraceae M.Fleisch. and Rigodiaceae H.A.Crum (Bryopsida) in Africa [O'Shea]

A further one has been accepted for vol. 22(3):

12. A revision of the genus *Rhacopilopsis* Renauld & Cardot (Hypnaceae, Bryopsida) [Watling & O'Shea]

The following papers have been submitted but as yet no response has been received:

- 13. Andreaeaceae [Hodgetts].
- **14**. Allisoniaceae, Arnelliaceae, Aytoniaceae, Geocalycaceae, Gymnomitriaceae, Pallaviciniaceae. [Wigginton & Porley]

All the Malawi papers are listed on the TBG web pages.

Families not so far treated in this series of papers fall into two categories: those where taxonomic problems indicate that a paper should be written, and those where there are few taxonomic problems, and where a full paper would give little benefit. It is intended that the latter category be gathered together in a 'new and other unpublished records' paper. This would be an annotated list, so short notes could be made against taxa if needed, but principally would allow the publication of new records for Malawi.

There are still many Malawi collections to be identified, but it will take many years satisfactorily to complete this task as there are several quite large families where identification is very difficult because taxonomic work is still required. It is to be hoped that Malawi specimens will be included when the necessary work takes place. Some of this may take place for the Uganda bryophyte flora, and more of it will be part of on-going research programmes.

The latest position on the Malawi collections is now on the TBG web site (take the 'Tropical Bryology Group' option from the BBS web site main menu: www.rbge.org.uk/bbs/) but good progress has been made, and is still continuing. The overall totals are as follows:

	Total	Sent	Ident.	Taxa	New
Moss	3487	2944	1613	145	76

Heps	1799	1763	1046	169	94
Total	5286	4707	2659	314	170

The figure of 170 taxa new to Malawi represents 54% of the total species found.

The total number of specimens tends to increase as further examination reveals more species in bulk gatherings, but the number sent to experts is comparatively low as several experts who promised to work on the plants have not done so, so no further specimens are being sent. Only 50% are so far identified, but most of the rest represent taxa in the 'difficult' group, which need further taxonomic work.

Uganda Expedition

Publications The next in the 'Bryophytes of Uganda', series, published in *Tropical Bryology*, will be a second 'new and interesting' paper, and we hope to get this ready for publication later this year.

Most people have made little progress this year on their collections, although the fact that we can publish another paper on new records indicates that a few people have been working quite hard. The GBA work has diverted others, but work should start in earnest later this year in preparation for the *Mosses and Liverworts of Uganda* book.

Additions to the BBS TBG World Wide Web site

All TBG documents are available on the TBG web site: http://www.rbge.org.uk/bbs.htm

The following additions have been made to the web site:

- * Malawi and Uganda publications lists updated
- * Malawi collections progress updated
- * Link added from Malawi collections to relevant publication
- * Malawi checklist added, to be updated with all additions since 1993
- * The list of the 'Huon Peninsula' series (of papers on the Asian tropics) has been updated.
- * TBG progress report for 1998/9 added
- * Link to North African checklist added
- * Document 62 added:

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News of members

TBG members were totally un-newsworthy this year.				
	New members/Change of address			
None.				

Tropical Bryology

Vol.17 was published in December 1999 and vol. 18 in July 2000. Vol. 19 will be published in December 2000. The journal continues to have a wide range of contributions, including some not strictly tropical (e.g. Frahm's revisions of *Rhabdoweisia* and *Amphidium*), but always having several Africa-related items. Contact Jan-Peter Frahm (frahm@uni-bonn.de) to become a subscriber - usually about £10 pervolume. There is a new web page for the journal (but not up-to-date):

http://www.uni-bonn.de/bryologie/tb.htm

Other publications

Not yet published:

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

Part 2 is now complete, and available on the MBG web site, but no publication date appears to have been fixed, and it does not yet appear in the MBG Press list of forthcoming publications.

Crosby, M.R. et al. Moss Flora of China Vol. 2: Fissidentaceae to Ptychomitriaceae. Publ.: Missouri Botanic Garden.

Available November at \$75 (according to US bookshops), but not yet on MBG Press list.

Gradstein, R. and Churchill, S. Guide to bryophytes of tropical America. Publ.: New York Botanical Garden

Apparently the final text for this book has only just been agreed, so publication is not likely in the near future, but hopefully will be available before the next Newsletter! Not yet in the list of future publications of NYBG Press.

Shaw, J.A. & Goffinet, B. Bryophyte Biology. Cambridge University Press (New York).

This is due in the shops this month (August) at £60 (hb) or £22.95 (pb)

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

Published by: British Bryological Society Tropical Bryology Group

BRITISH BRYOLOGICAL SOCIETY

TROPICAL BRYOLOGY GROUP NEWSLETTER

No. 16 August 2001

The last Newsletter was distributed just a few days before the death of Alan Crundwell, a founder member of the TBG who was an active tropical bryologist throughout his bryological career, and was at the time of his death working on some of the more intractable Malawi collections. He was a man of great independence of mind and of judgement, and despite his poor health he was helpful to us relative beginners to the end. We will miss a great and unconventional personality who always retained his sense of humour.

Another TBG member also died during the year: Theo Arts. Theo made a quick impact on our knowledge and understanding of tropical mosses with his clear text and elegant drawings, and had launched an ambitious personal project to produce a moss flora of Réunion, and it is only to be hoped that his extensive collections are identified and published. Theo also contributed to GBA, and would have been involved with the Uganda bryophyte flora project.

Brian O'Shea

New TBG Co-ordinator needed!

I not quite sure when I took over from Martin Wigginton as coordinator of the TBG, but it must have been about 12 years ago - and I think the time has come for me to stand down. The last decade has been a very fulfilling time for me, and I have gone from having never collected a tropical moss to having collected rather too many (judging from the number still awaiting identification). Is there anyone out there who would like to volunteer? If so, please let me know as soon as you can, so we can make the change at the TBG AGM, which will take place as follows:

Annual General Meeting

The next AGM of the TBG will be in Cardiff at 8pm on 8th Sept. 2001, in the old Department of Botany (about 30 yds away from the Main Hall where the Conversazione will take place).

AGM AGENDA

- 1. Notes of last AGM
- 2. Matters arising
- 3. EWJ Tropical African hepatic flora
- 4. Uganda Expeditions & bryophyte flora
- 5. African Generic Flora (GBA)
- 6. Malawi update
- 7. Future TBG Expeditions
- 8. Election of executive and coordinator
- 9. Any other business
- 10. Place & date of next AGM: Sept 2002, Edinburgh, following BBS AGM

BBS TBG AGM

9 September 2000, Reading

Notes of Meeting

Present: Neil Bell, Len Ellis, Nick Hodgetts, Sanna Huttunen, David Long, Malcolm McFarlane, Royce Longton, Angie Newton, Brian O'Shea (chair & notes), Ron Porley, Robin Stevenson, Herman Stieperaere, Malcolm Watling.

Apologies: Jeff Bates, Jeff Duckett, Cliff Townsend, Martin Wigginton.

- 1. **Notes of last AGM** (see *Newsletter 15*). Accepted.
- 2. Action points from previous meeting:

Brian O'Shea was asked to contact Royce Longton to determine the position regarding distribution of Malawi specimens. The distribution from Reading has now started: the first 330 collections have been lodged at E, and duplicates of some taxa have been distributed to MAL, MO, NAI and RNG. (Many specimens are very small and impossible to share, but an attempt is being made to provide a representative selection of taxa to each recipient.)

3. Eustace Jones tropical African hepatic flora. The position was unchanged: in summary, the text was almost complete and would require very little extra work, but illustrations of only 20 species had been drawn (by an artist from National Botanic Garden at Meise, Belgium). Although the rest of the species (mainly the commoner ones, around 40 in number) had been illustrated already by either Vanden Berghen or E.W. Jones, it was not considered that all of these matched the quality or style of the new plates. Herman Stieperaere from Meise stated that the Botanic Garden would be willing to publish the flora in one of their journals, but probably would only be able to do perhaps half of the remaining plates. Malcolm Watling might be able to do the rest of the remaining plates, but thought it might take at least a year, bearing in mind his other commitments. There was a feeling that the flora would be significantly enhanced by including illustrations of all taxa - but also that it was important to publish the document as soon as possible (before it needed further amendment), whether or not all taxa were illustrated. option was to publish what existed on the web, until such time as a paper publication was possible. In addition it was considered important that the publication be affordable to African buvers. and Belgian journal the Bryophytorum Bibliotheca who had also offered) did not provide such reductions (although might presumably they be negotiated). Unfortunately the only person who was aware of the current position was Martin Wigginton, who had left the previous day for a six week visit to Australia. David Long emphasised that getting the book published hadn't been the problem, rather the insistence that all plates be produced. As the issue still remained of producing the plates (and also the amount of support that this task required, to provide specimens, as well as advice on which characters needed illustrating), no action could be taken until Martin returned. Dr. Stieperaere was thanked for his offer, which was welcomed by all present, and David Long agreed to send the latest version of the text (not the final version) to Meise, for guidance on the overall size of the publication.

Action point 1: David Long to provide copy of text of EWJ hepatic flora to Herman Stieperaere.

Action point 2: David Long to discuss with Martin Wigginton on his return in October.

- 4. **Uganda Expeditions and bryophyte flora** Jeff Bates was unable to attend the AGM, but was expected to be circulating participants in the 'Bryophytes of Uganda' project shortly. No participant in the expeditions had yet completed identification of their specimens, and current progress indicated that many more plants would be found new to the known flora.
- 5. **African generic flora.** Progress on this project had been covered in *Newsletter 15*. Work was progressing, although was delayed because the workshops had been cancelled, thus giving more time. Martin & Brian needed to start work on the introductory text in the new year, so would be hoping for most families to be complete by then.
- 6. Malawi update. More papers have been published and are in the pipeline, but it had been decided to publish all non-critical identifications in a list of 'new and seldom collected' bryophytes This would include all taxa in for Malawi. families that were reasonably well known, and didn't require taxonomic revision. The Malawi checklist was also to be updated and added to the TBG web site. This would enable most of the Malawi work to be completed, just leaving families currently being worked on, and those where the necessary expertise for taxonomic study was unavailable - thus clearing the decks for work on the Uganda collections.
- 7. **Future TBG expeditions** Jeff Duckett confirmed that the possibility of expeditions to Kenya was still there, based on an agreement now being arranged between QMW (London) and Kenyatta University (Kenya) supported by British Council. He would advise as arrangements were confirmed.

Catherine Lafarge had suggested a trip to Madagascar (where she had collected previously), but sources of funding had not yet been looked into.

Further trips to Malawi and Uganda have not yet been considered in any detail.

- 8. **Election of executive**. Executive re-elected.
- 9. Any other business. None.

10. **Place and date of next AGM**: Cardiff, 8th September 2001.

Action Points:

AP1. David Long to provide copy of text of EWJ hepatic flora to Herman Stieperaere.

AP2. David Long to discuss the EWJ hepatic flora with Martin Wigginton on his return in October.

Brian O'Shea, 19 September 2000

Eustace Jones West African hepatic flora

No progress has been made since last year's AGM and it seems unlikely that the present position will be resolved. A proposal will be made at the AGM.

Alan Eddy's Malesian Mosses

In the last Newsletter, a timetable of 3 to 5 years was given for the completion of volume 4 of Alan Eddy's flora. Further investigations have now been made by Angie Newton to quantify the work involved, looking at what has been covered so far and what is still to be done. families that might have been expected in earlier volumes need to be included, and a detailed look has been taken at what Alan expected to include. This has clarified what needs to be covered in volume 4, and what is left for volume 5 (Hookeriales and Hypnales). Work on many genera is almost complete, although most need some quite time-consuming finishing touches, such as family descriptions and keys to genera, but others were not even included in the list that Alan was hoping to cover. A final species list is being drawn up to look at the amount of text that is needed, and also to start matching this with the illustrations that are already completed. timetable of 3 to 5 years can now be shortened to 2 to 4 years, but it will be probably another year before much work is started.

Future TBG expeditions

Nothing planned at present.

Guide to bryophytes of sub-Saharan Africa (GBA)

Progress has been disappointing on this non-BBS activity, which involves many TBG members. All the hepatics text and illustrations are complete, but the moss contributions are behind schedule. Although the target was for the end of last year, many families were not completed, and little has been produced since. It has not been helped by the editor for mosses being overcommitted on other things, and not chasing up undelivered manuscripts. Many missing contributions are either small, or nearing completion and so little effort is needed to complete them, but some large families still remain, and the problem of illustrating all the families has still not been resolved. There are about 119 families with 492 genera to complete and the current position is that 62% of families have been delivered to the editors and 44% of genera, although a number of these have not been illustrated: the latest position is shown on the Tropical Bryology Research web site:

http://www.oshea.demon.co.uk/tbr.htm
The web site includes an introduction to the project, instructions to authors, a sample family treatment, details of all the families and genera to be treated, and who is treating each family. A number of family treatments have also been added to the site.

As well as the GBA information, the TBR web site also describes what TBR is, includes version 3 of the sub-Saharan African moss checklist and will shortly include the first version of a sub-Saharan African hepatic checklist (including East African Islands), which incorporates new data published since the Bryophytorum Bibliotheca catalogues in 1995 and 1996; (both available for downloading), and African moss diversity & endemism data. Also available for downloading is a synopsis of the non-leucobryoid Calymperacae (92 pages).

Mosses and Liverworts of Uganda

This book will be edited by Jeff Bates, with Nick Hodgetts being editor for liverworts and Brian O'Shea for mosses. The updated instructions to authors have now been distributed by Jeff Bates, and the information for collectors and distributors will have been circulated before you receive this newsletter. We had hoped to complete identification of all Uganda collections by the end of July, ready to start distribution to authors, but that target will not be met, although it may

still be possible to reach the target of all specimens being distributed by the end of the year. The task of identifying specimens down to family is not too difficult, but there is always the interesting-looking temptation to pursue collections rather further. If you still have Uganda collections to look at, try to stick at the family level, or you won't get the collections out in time to be looked at by the authors. If the family identification is wrong, it doesn't matter, as authors have been asked to return these to the co-ordinators for re-distribution. Manuscripts are required to be with editors by the end of April 2003.

In addition to the TBG expedition collection. there are also over 1000 Ugandan collections, made by Francis Rose about 30 years ago, held at the Natural History Museum. All the mosses and most of the hepatics are named to family, and details are held on computer. The naming to family is rather crude, and there will be many mistakes, but as with the TBG collections, authors can send them back if they are wrongly identified. There are 26 hepatic families and 40 moss families identified, and I will circulate a list of the families to all authors. As these are NHM collections, they must be requested on loan by applying to Len Ellis (L.Ellis@nhm.ac.uk).

Malawi expedition

Four more papers in the Malawi series have now been published:

- **12**. A revision of the genus *Rhacopilopsis* Renauld & Cardot (Hypnaceae, Bryopsida) [Watling & O'Shea] *Journal of Bryology* **22**: 209-218, 2000.
- **13.** New and other unpublished records. [O'Shea, Wigginton, Bruggeman-Nannenga, Hodgetts & Porley] *Tropical Bryology* **20:** in press, 2001
- **14.** Allisoniaceae, Arnelliaceae, Aytoniaceae, Geocalycaceae, Gymnomitriaceae, Pallaviciniaceae (Hepaticae). [Wigginton & Porley] *Journal of Bryology* **23:** 133-138, 2001
- **15**. Lejeuneaceae, and the occurrence and frequency of foliicolous taxa [Wigginton] *Tropical Bryology* (2001) **20:** in press.

All the Malawi papers are listed on the TBG web pages. Paper 13 cleared out a large number of identifications of non-critical taxa, and added 83 new taxa to the Malawi list, and most of the remaining work is to deal with those with

taxonomic problems. For several families this work is already in hand, but for others there is no expert willing to take it on.

The latest position on the Malawi collections is now on the TBG web site (take the 'Tropical Bryology Group' option from the BBS web site main menu (www.rbge.org.uk/bbs/) but good progress has been made, and is still continuing. The overall totals are as follows:

	Total	Sent	Ident.	Taxa	New
Moss	3473	2989	1876	179	87
Heps	2176	2074	1672	198	113
Total	5649	5063	3548	377	200

The figure of 200 taxa new to Malawi represents 53% of the total species found. These totals do not entirely agree with the actual number of taxa currently on the checklist, due to synonymisations and re-identifications of taxa delat with in earlier papers, but there are now 225 liverworts and 268 mosses on the Malawi list - an increase of (62%) on the pre-expedition checklist. Up-to-date checklists of mosses and liverworts are on the BBS web site.

The total number of specimens increases with each publication of this table, as further examination reveals more species in bulk gatherings, but the number sent to experts is rather lower as several experts who promised to work on the plants have not done so, so no further specimens are being sent. Only 63% are so far identified, but most of the rest represent taxa in the 'difficult' groups, which need further taxonomic work.

Uganda Expedition

Publications

4. New and additional records, 2. [Wigginton, O'Shea, Porley & Matcham.] *Tropical Bryology* **20:** in press, 2001.

36 mosses and liverworts new to Uganda were included in this latest paper, including *Claopodium pellucinerve*, new to Africa, found by Ron Porley on Mt. Elgon. A further paper is awaiting the arrival of a herbarium loan before it can be completed:

5. *Bryocrumia* L.E.Anderson (Hypnaceae, Musci), a monotypic genus new to Africa [O'Shea & Buck] *Tropical Bryology*

See item above on the *Mosses and Liverworts of Uganda* book for progress on identification of collections.

Additions to the BBS TBG World Wide Web site

All TBG documents are available on the TBG web site:

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

The following additions have been made to the web site:

- * 23 Aug 2000: Document 62: *Newsletter* 15 added.
- * 25 Sep 2000: Malawi collections progress updated, and revised checklist added.
- * 22 Oct 2000: List of the 'Huon Peninsula' series (of papers on the Asian tropics) updated.
- * 22 Mar 2001: TBG progress report for 2000 added.
- * 15 July 2001: Malawi and Uganda publications lists updated.
- * 7 Aug 2001: *Newsletter 16* added (doc. 63).

News of members

*Marta Infante and Patxi Heras sent the following report:

BRYOPHYTE COLLECTING IN ANNOBÓN (EQUATORIAL GUINEA) 16 October - 1 November 2000

Annobón is a small volcanic isle (17 km²) located in the Guinea Gulf, 350 Km from the African continent which belongs to the Republic of Equatorial Guinea. Uninhabited when it was discovered by Portuguese sailors in 1471, it was populated by slaves brought from the nearest coasts. For centuries the isle and its people have remained isolated and a peculiar cultural identity and language have arisen. Nowadays, there are circa 3,000 people, earning their living cultivating and fishing, and their only regular contact with the mainland is an annual ship.

Due to its secular isolation, very few naturalists have been able to visit the isle during XXth century. The last scientific team was there in 1959. The scarce previous data on bryophytes (53 species) come mainly from German expedition by J. Mildbraed, (1910-1911) and Knut Byström (1953).

The present expedition included two Spanish zoologists, two Spanish bryologists, a

botanist from Sao Tomé and one from Equatorial Guinea. Despite all our efforts, only partial funding was obtained from four different institutions. The cooperation from the local authorities and people could not have been better. Most memorable will be the 27 hour trip from Sao Tomé to Annobón in a tiny 10 metre long boat packed with eight people.

Annobón is very mountainous and craggy. The highest point is 612 m a.s.l. (Santa Mina). This sharp relief creates a striking rainshadow effect so there is a strong difference between the driest Northern part and the moist Southern one. Mist is trapped among the slopes, originating a cloudy forest above 500 m, plenty of epiphytes (ferns, bryophytes and pendent lichens) and including small groves of tree-ferns. At lower elevations, dry tropical forests and savannah with *Ceiba* and baobab trees occur. These are the most disturbed areas since the villages and the cultivation fields of the natives are mainly here.

Bryophyte collecting was made in all of these habitats, including two altitudinal transects made in North and South slopes of the island. Cloudy forest was the most promising vegetation for bryophytes, where huge masses Mastigophora diclados covered the trunks and curtains of Lejeunea acuta, Orthostichidium involutifolium and Floribundaria floribunda hung from branches. This habitat has been much reduced by human population pressure; only 25 metres from the top of Mount Quioveo (590 m) there are openings to cultivate banana and malanga. This is a worrying matter, since all the fresh water available in the island is captured by this vegetal formation and canalised only by three permanent streams.

Special attention was given to the epiphylls, which covered virtually all leaves in the areas above 350 m, although diversity seem to be low (*Leptolejeunea* spp., *Ceratolejeunea* spp., *Colura digitalis*, etc..). Bryophytes in the dry forest in the lower areas were much less conspicuous, but still a fairly good number of species are expected, including *Riccia* spp., *Thuidium tenuissimum*, *Schiffneriolejeunea* pappeana, etc..

*Len Ellis visited Kalimantan (Borneo) for two weeks in March 2000, surveying bryophyte diversity in logged and unlogged forest, with predictable results! This was part of a survey that also looked at lichens and termites.

*Howard Matcham visited South Africa for two weeks in February this year.

*Angie Newton and Neil Bell (PhD student) visited eastern Australia, New Caledonia and Tasmania in October/December 2000 for 6 weeks as part of Neil's work on the Rhizogoniaceae, and made a large number of collections, now being worked on.

*Brian O'Shea visited Rarotonga, Cook Islands, (on the way to New Zealand) in November 2000 for 5 days and made collections with Gerald McCormick, of the Cook Island Natural Heritage Project. There were many taxa new to the islands, and these are now being identified, with Martin Wigginton looking at the hepatics. As there is no proper collections-based checklist for the island, a number of unidentified collections of Cook Islands bryophytes held in New Zealand are also being obtained on loan, to provide as full a picture as possible.

New members/Change of address

There have been no new members this year, and with the loss of Theo Arts and Alan Crundwell, the membership of the TBR now stands at 56. The membership list is on the web page, including contact details for those who have specifically authorised it.

Tropical Bryology

Vol.19 was published in December 2000 and vol. 20 is due in October 2001. Volume 20 in particular will contain a lot of TBG contributions. Contact Jan-Peter Frahm (frahm@uni-bonn.de) to become a subscriber - usually about £10 per volume. There is a new web page for the journal:

http://www.uni-bonn.de/bryologie/tb.htm

Other publications

Allen, B. Moss Flora of Central America. Part

2. Publ.: Missouri Botanic Garden.

Part 2 is still available on the MBG web site, but still not published.

Crosby, M.R. et al. Moss Flora of China Vol. 2: Fissidentaceae to Ptychomitriaceae. Publ.: Missouri Botanic Garden.

Available from MBG for \$75 + postage.

Gradstein, R. and Churchill, S. Guide to bryophytes of tropical America. Publ.: New York Botanical Garden

Proforma invoices for this have now been sent out, but I have not yet seen a copy. Published as Memoirs of the NYBG vol. 86, at \$75 + postage.

Shaw, J.A. & Goffinet, B. Bryophyte Biology. Cambridge University Press (New York).

Published August 2000 at £60 (hb) or £22.95 (pb)

If anyone is aware of other books of interest to

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

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Published by: British Bryological Society Tropical Bryology Group

BRITISH BRYOLOGICAL SOCIETY

TROPICAL BRYOLOGY GROUP NEWSLETTER

Edited by: Brian O'Shea and Michelle J. Price

No. 17 August 2002

Annual General Meeting

The next AGM of the TBG will be in Edinburgh on the 14th Sept. 2002, following the BBS AGM (probably to be held in the early evening).

AGM AGENDA

- 1. Notes of last AGM
- 2. Matters arising
- 3. EWJ Tropical African hepatic flora
- 4. Mosses and Liverworts of Uganda
- 5. African Generic Flora (GBA)
- 6. Future TBG expeditions/trips
- 7. Election of executive and coordinator
- 8. Any other business
- 9. Place & date of next TBG AGM: London (Queen Mary and Westfield College), 5 Sept. 2003, following the BBS AGM.

BBS TBG AGM

8 September 2001, Cardiff Notes of Meeting

Present: Neil Bell, Tom Blockeel, Nick Hodgetts, David Holyoak, David Long, Peter Martin, Howard Matcham, Angie Newton, Brian O'Shea (chair and notes), Roy Perry, Martin Wigginton. **Apologies**: Ron Porley, Michael Procter, Robin Stevenson, Herman Stieperaere, Malcolm Watling.

- 1. **Notes of last AGM.** (see *Newsletter 16*). Accepted.
- 2. Action points from previous meeting:
 AP1. David Long to provide copy of text of
 EWJ hepatic flora to Herman Stieperaere.
 AP2. David Long to discuss the EWJ hepatic
 flora with Martin Wigginton on his return in
 October. Both action points were pursued see
 notes under next item.

- 3. Eustace Jones tropical African hepatic flora. It was reported in Newsletter 16 that no progress had been made since last year's AGM and that it seemed unlikely that the present position would be resolved, but that proposals would be made at the AGM. As it was deemed important to pursue this project as a memorial to Eustace Jones as well as to publish the flora, a proposal was being considered to produce a web version from the existing text and illustrations, together with other Jones and Vanden Berghen illustrations, and to load this to the BBS website as an interim solution - providing agreement could be reached regarding the use of the illustrations prepared at Meise (National Botanic Garden of Belgium). However, two days before the meeting an email was received from Dr. Stieperaere making a much more attractive proposal: Meise was still keen to publish the flora, at their expense, and to produce another 20 plates of drawings provided the text could be brought up to date by the end of 2002. He also stated that 'at cost' copies could be made available for African buyers (although this would raise the price to non-Africans to compensate). Following some discussion it was proposed that the Meise offer be accepted and that Roy Perry would coordinate the activity of reviewing the text
- AP1. Brian O'Shea to email Herman Stieperaere about the decisions taken.
- AP2. Martin Wigginton to bring Roy Perry up to date on the state of the text, and to provide a conv.
- AP3. Brian O'Shea to copy to Roy Perry the current list of hepatic family coordinators.

Subsequent to the meeting, Martin Wigginton agreed to review (and where necessary revise) all the families he had been involved with already, leaving around half of the 375 species to be reviewed/revised by others.

4. **Uganda Expeditions and bryophyte flora.** The current position was summarised in *Newsletter 16*. Additional information: a

preliminary treatment of a family and a few genera and species had been produced, which provided a useful opportunity to review the style, level of detail etc. that was required. The editors were generally very pleased with results, although the genus and species accounts were a little longer than expected.

Jeff Bates was keen to arrange a one day workshop to allow collectors to pass identified material to coordinators and to continue with their own identification work. To be arranged.

Nick Hodgetts said that he had now produced and despatched the final report on the Uganda project, and had received informal feedback that our project was considered highly, and as one of the better Darwin projects.

- 5. African generic flora. Progress on this project had been covered in Newsletter 16. Little work had been done during the last year due to other commitments and the lack of editorial action on the mosses. It was hoped to start making progress again in the new year.
- 6. Malawi update. As in Newsletter 16. Only intractable families and genera remain, and would be dealt with as expertise became available.
- 7. **Future TBG expeditions.** See Newsletter 16: none being arranged. As a new coordinator was to be proposed, this was seen as something for the next coordinator to review.
- 8. Election of executive. As Brian O'Shea wished to resign as Coordinator, volunteers for this post had been requested in Newsletter 16. Despite interest from some, finally only one candidate emerged: Michelle Price. Although Michelle had been a member of the group for some time, and was participating in some of the projects, she had been based for the last few years in Missouri Botanic Garden, and having now finished her PhD, was moving to Geneva as bryophyte curator. However, as almost all communications within the group were now by email, the only time everyone met face to face was at the AGM, and provided Michelle could attend these meetings there was seen to be no problem about her being based in Geneva rather than the UK. She was therefore unanimously elected, and handover would take place in October, when she moved to Geneva.

It was considered that this change would allow a fresh look to be taken of the activities and direction of the group and it was thus suggested by the Chair that the existing Executive be reelected to provide support during the next year of transition. The Executive were thus re-elected.

Angie Newton expressed thanks to Brian O'Shea for his long period as coordinator of the group.

- 9. Any other business. The second circular for the IAB World Conference of Bryology in Lucknow, India in January 2002 had now been received, and details of the meeting were given.
- 10. Place and date of next AGM: Edinburgh, 14th September 2002.

Action Points:

- AP1. Brian O'Shea to email Herman Stieperaere about the decisions taken.
- AP2. Martin Wigginton to bring Roy Perry up to date on the state of the text, and to provide
- AP3. Brian O'Shea to copy to Roy Perry the current list of hepatic family coordinators.

Brian O'Shea, 10 September 2001

Eustace Jones West African hepatic flora

This flora (now apparently known familiarly as 'WAFLO') has made good progress over the last year. Martin Wigginton has worked hard on the text and it is now being refereed. Good progress has been made in Meise on the illustrations, which are apparently superb. The final details remain to be settled, but all parties will be present at the AGM meeting in Edinburgh, and we expect to have a better and fuller picture at the TBG AGM.

Future TBG expeditions/trips

A tentative proposal has made to re-visit Malawi, to add a wider spread of localities to those visited in 1991. Zach Magombo would like assistance in the field towards his objective of being able to produce a 'mosses and liverworts of Malawi' book.

Guide to bryophytes of sub-Saharan Africa (GBA)

This non-BBS activity, which involves many TBG members, is being relaunched in an attempt to complete the outstanding work (about half of the total effort) in the next year. Most hepatic accounts are complete (although not the drawings), but the moss contributions are well behind schedule. Many of the missing contributions are either small, or are nearing completion and so little effort is needed to complete them. However, some large families also need to be finished, and the problem of illustrating all the families is still to be fully resolved. There are about 120 families with 495 genera to complete and the current position is that 59% of families have been delivered to the editors and 47% of genera, although a number of these have not been illustrated: the latest position is shown on the new Tropical Bryology Research website: http://www.oshea.demon.co.uk/tbr/

The website includes an introduction to the project, instructions to authors, a sample family treatment, details of all the families and genera to be treated, and who is treating each family. A number of family treatments have also been added to the site.

As well as the GBA information, the TBR website also describes what TBR is, includes version 3 of the sub-Saharan African moss checklist, the first version of a sub-Saharan African hepatic checklist (including East African Islands), which incorporates new data published since the *Bryophytorum Bibliotheca* catalogues in 1995 and 1996; (both checklists available for downloading), and African moss diversity & endemism data. Also available for downloading is a synopsis of the non-leucobryoid Calymperaceae (92 pages).

Mosses and Liverworts of Uganda

This book will be edited by Jeff Bates, with Nick Hodgetts as co-editor for liverworts and Brian O'Shea as co-editor for mosses. A description of the project and all the documents made available to the participants are available on the BBS website by taking the 'Tropical Bryology Group' option and then the 'mosses and liverworts of Uganda' link. Although not all collections are yet identified and distributed to authors, most are. The task of identifying specimens down to family is not too difficult, but there is always the interesting-looking temptation to pursue collections rather further. If you still have Uganda collections to look at, try to stick at the family level, or you won't get the collections out in time to be looked at by the authors. If the family identification is wrong, it doesn't matter, as authors have been asked to return these to the co-ordinators for re-distribution. Manuscripts are required to be with editors by the end of April 2003.

In addition to the TBG expedition collection, there are also over 1000 Ugandan collections, made by Francis Rose about 30 years ago, held at the Natural History Museum. All the mosses and most of the hepatics are named to family, and details are held on computer. The naming to family is rather crude, and there will be many mistakes, but as with the TBG collections, authors can send them back if they are wrongly identified. There are 26 hepatic families and 40 moss families identified, and a list of the families has been sent to all authors. As these are NHM collections, they must be requested on loan by applying to Len Ellis (L.Ellis@nhm.ac.uk), as should other requests for material in connection with producing this book.

Malawi expedition

The two latest papers in the Malawi series have been published:

- **13.** New and other unpublished records. [O'Shea, Wigginton, Bruggeman-Nannenga, Hodgetts & Porley] *Tropical Bryology* **20:** 1-26, 2001
- **15**. Lejeuneaceae, and the occurrence and frequency of foliicolous taxa [Wigginton] *Tropical Bryology* **20**: 83-95, 2001.

A further paper arising from the Malawi collections was also published:

Felipponea (Leucodontaceae, Musci), a new genus for Africa, to include "Leucodon maritimus" and L. assimilis. [O'Shea] Tropical Bryology **20:** 43-49, 2001.

Most of the remaining work concerns families with taxonomic problems. For several families this work is already in hand, but for others there is no expert willing to take it on.

The latest position on the Malawi collections is now on the TBG website (take the 'Tropical Bryology Group' option from the BBS website main menu) There are now 225 liverworts and 268 mosses on the Malawi list - an increase of 62% on the pre-expedition checklist. Checklists of mosses and liverworts are on the BBS website, but the moss list has not yet been updated to reflect the most recent publications.

Uganda Expedition

Publications

Two articles listed in the last newsletter are now published:

- **4**. New and additional records, 2. [Wigginton, O'Shea, Porley & Matcham.] *Tropical Bryology* **20**: 55-62, 2001.
- **5**. *Bryocrumia* L.E.Anderson (Hypnaceae, Musci), a monotypic genus new to Africa [O'Shea & Buck] *Tropical Bryology* **20**: 103-108.

See item above on the *Mosses and Liverworts of Uganda* book for progress on identification of collections.

Additions to the BBS TBG internet website

All TBG documents are available on the TBG website:

 $\underline{http:/\!/www.BritishBryologicalSociety.or} \\ g.uk/$

and take the 'Tropical Bryology Group' option.

The following additions have been made to the website since the publication of the last newsletter:

- * 9 Jan 2002: TBG publications on Malawi and Uganda updated.
- * 4 Mar 2002: TBG progress report for 2001 added.
- * 15 May 2002: *Mosses and Liverworts of Uganda* book information for authors added.
- * 11 Aug 2002: *Newsletter 17* added (doc. 64).

News of members

Neil Bell, Ph.D. student of Angela Newton, is completing his studies of phylogeny and character evolution in the Rhizogoniaceae and other bryalean pleurocarpous groups, at the Natural History Museum (BM), London.

Yelitza Leon was awarded her Ph.D. from the University of Bonn, Germany in August 2001. Her thesis was entitled: Epiphytic bryophyte diversity of lower montane (old growth) forest in Mérida, Venezuela. An abstract is available: http://www.bryologie.uni-bonn.de/english/frame.htm, and select the 'student projects' option

Yelitza is now a professor in Centro Jardín Botánico, Facultad de Ciencias, Universidad de los Andes, Mérida, Venezuela. Currently she is the Botanical Garden General Coordinator and is working actively on the Scientific Coordination of the Garden, organizing the IAB meeting Mérida 2003. Her research

focus is on bryophyte surveys of cloud forests and the family Cryphaeaceae for the Neotropics.

Zach Magombo was awarded his Ph.D. from the University of Missouri-St. Louis, U.S.A. in May 2002. His thesis was entitled: Systematic and biogeographic studies of the moss family Diphysciaceae M. Fleisch. (Musci). Publications: (i). The Phylogeny of basal peristomate mosses: evidence from cpDNA, and implications for peristome evolution. Systematic Botany (in press). (ii). New combinations and synonyms in the moss family Diphysciaceae. Novon (in press)

Zach will return to Malawi at the end of August to take up a position as Scientific Officer at the National Herbarium of Malawi where he will be responsible for research and curation of herbarium specimens, and teaching through a joint program at the University of Malawi. To help develop the herbarium and research facilities in Malawi Zach is interested in receiving books and reprints and in any available specimen exchange programs (all regions).

Michelle Price was awarded her Ph.D. from the University of Missouri-St. Louis, U.S.A. in May 2002. Her thesis was entitled: A systematic study of the moss genus *Holomitrium* Brid. (Dicranaceae): An integrated study of taxonomy, biogeography and phylogeny.

Michelle became the curator of bryophytes, ferns and gymnosperms at the Conservatoire et Jardin botaniques de la Ville de Genève (G), in October 2001.

IAB meeting at Lucknow

Liz Kungu, David Long, Royce Longton, Brian O'Shea, Lars Söderström and Ben Tan from the TBG all attended the IAB meeting in Lucknow, India, in January 2002.

Brian O'Shea contributes the following:

Around 80 delegates attended, 25 from outside India, and were rewarded by four symposia, 36 invited or contributed papers and 27 posters, as well as a three day field trip. An account of the proceedings will appear in the next issue of *Bryological Times*.

I contributed to the symposium 'Flora and biogeography of mosses of the Indian Sub-Continent'. India is probably the largest landmass in the world without a bryophyte checklist. Several summaries of the taxa of south east Asia have appeared over the years, but

always largely based on mid-nineteenth century data, and none particularly useful for translating into a country checklist. Checklists are now available for Pakistan, Nepal (almost!), Bhutan. Bangladesh, Sri Lanka and Indochina, but none for India itself, so this symposium was a useful opportunity to review what we know of the Indian sub-continent, and to update existing checklists and make a preliminary attempt at an Indian checklist. Although the checklist (being produced largely by Ben Tan and Zen Iwatsuki) was not ready in time for the conference, they had reasonably good data about the number of taxa involved and their distribution across the country. The full checklist, together with the other papers from the symposium will appear later this year in the Journal of the Hattori Botanical Laboratory vol. 93. As well as an overview of the sub-continent (presented by Ben Tan), there were presentations on the plains of northern India (Dr B.D. Vashistha), Eastern Himalayas (Dr J.N. Vohra), Sri Lanka and Bangladesh (O'Shea) and Pakistan (Dr M. Higuchi).

The whole occasion was an excellent opportunity to meet new people and see old friends, and I was particularly pleased to meet Dr Vohra, whose book on the Leskeineae of the Himalayas I had found so useful, as well as many others who I had known previously only through their publications. We were disappointed that there was no-one present from America - all foreign visitors were from Europe or elsewhere in Asia, (particularly Japan) - but this was to be expected considering the difficult political situation. It was unfortunate that the field trip to Nainital (an area in the Himalayan foothills wellknown for its bryophytes) was not attended by more of the local participants, but the cost was quite high, and so it was mainly non-Indians who attended. After the three day field trip, four of us (myself, David Long, David Rycroft, Lars Söderström and Lars' student Kristian Hassel) stayed on for a few more days, and visited some of the classic sites of the area, with David in particular very pleased by the abundance of thalloid hepatics, and for me a new set of pleurocarps. David's account of the trip will be appearing in Bryological Times, and there may be a further publication when we have all identified our specimens. We are now looking forward the next IAB meeting in Merida, Venezuela, in July 2003.

IAB Symposium, Mérida, Venezuela, July 21-27, 2003 The first circular for this meeting has now been distributed via bryonet (and will also appear in *Bryological Times*). The field trips are being arranged to cover a spread of different altitudes (from 2000 to 5000 m), so it will be an opportunity to see a fascinating array of species from montane rain forest to paramo. Contact Yelitza León (yeltleon@ciens.ula.ve) if you would like further information.

New members/Change of address

New Member: Min S. Chuah-Petiot: Department of Botany, University of Nairobi, Kenya.

The membership of the TBG now stands at 57 (32 based in the UK). The membership list is available on the TBG web page, including contact details for those who have specifically authorised it.

Change of address: Zach Magombo – National Herbarium & Botanic Gardens of Malawi, P.O. Box 528, Zomba, Malawi. Tel: +265-1525-388. Email: zlkmagombo@hotmail.com.

Tropical Bryology

Vol.20 was published in December 2001 and vol. 21 in June 2002. Volume 20 contained 12 contributions from TBG members (mainly on Malawi and Uganda), and vol. 21 contained 8 items from TBG members, but only one item specifically on African bryophytes. Contact Jan-Peter Frahm (frahm@uni-bonn.de) to become a subscriber - usually around £10 per volume. There is a web page for the journal:

http://www.bryologie.unibonn.de/english/frame.htm and click on 'journals'

Tropical African Bryology: Future Flora

Chuah-Petiot, M.S. (late 2002 or early 2003) A Guide to the Mosses, Liverworts and Hornworts of Kenya. Department of Botany, University of Nairobi, Kenya.

This book will treat around 320 species in Kenya, with keys to families, genera and species, descriptions, ecology and geographical distributions. It will be illustrated with over 320 line drawings. A CD-Rom of professional photographs accompanies the book. Price to be announced nearer to publication. An expression of interest in advance of publication will be appreciated. If you have any queries concerning this new publication, please do not hesitate to

contact the author (Mrs) Min S. Chuah-Petiot at: petiot@wananchi.com

Other publications

Gradstein, R., Churchill, S. & Salazar Allen, N. 2001. *Guide to bryophytes of tropical America*. Publ.: New York Botanical Garden, as *Memoirs of the NewYork Botanical Garden* 86.

This excellent volume is of great interest and value for even non-neotropical areas, with all families and genera described and illustrated. \$75 + postage.

Xiang-jiang, L., Crosby M.R. & He, S (editors). 2002. Moss Flora of China, English Version, volume 6, Hookeriaceae-Thuidiaceae. Science Press, Beijing, and the Missouri Botanical Garden Press, St. Louis, \$75 + postage. Email: mbgpress@mobot.org or shop online at www.mobot.org/mbgpress

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

Part 2 is available on the MBG website, and is to be published soon.

Rao, Pengcheng. 2001. Monographic studies on *Cryphaea* (Bryopsida). *Bryobrothera* **7:** 1-112.

This recent publication, the result of Dr. Rao's Ph.D. work at Helsinki, includes a synopsis of the genus worldwide including a key to all species of the world, together with a revision of the tax in Europe, Africa, Australia, Oceania and America. (Asian species were revised in his earlier paper: *Annales Botanici Fennici* 37: 45-56). Available from: Bookstore Tiedekirja, Kirkkokatu 14, FIN-00170 Helsinki, Finland. Credit cards accepted. Email: tiedekirja@pp.kolumbus.fi.

Kruijer, **J.D. 2002.** Hypopterygiaceae of the World. *Blumea* **13:** 1-388.

This blockbuster taxonomic revision tells you all that is known about Hypopterygiaceae world-wide. It is beautifully illustrated and meticulously researched - albeit rather expensive. Available from National Herbarium Nederland, Universitaet Leiden branch, Einsteinweg 2, P.O. Box 9514, 2300 RA Leiden, Netherlands (http://nhncml.leidenuniv.nl).

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

New TBG coordinator

Michelle Price has taken over from Brian O'Shea as coordinator of the TBG. A big Thank You to Brian for his many years of hard work and dedication as coordinator of the TBG.

Please send any address changes, book reviews, information on current research programs/projects, reports of field trips, TBG special requests, future field trip details, publications, new discoveries and any other information of interest to TBG members to Michelle Price. See address below.

Co-ordinator: Michelle J. Price, Conservatoire et Jardin botaniques de la Ville de Genève, Case

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BRITISH BRYOLOGICAL SOCIETY

TROPICAL BRYOLOGY GROUP

NEWSLETTER

Edited by Michelle J. Price

No. 18 August 2003

Annual General Meeting

The next TBG AGM will be in London on the 5 September 2003, Queen Mary, University of London. It will be held after the BBS AGM.

AGM AGENDA

- 1. Notes of last AGM
- 2. Matters arising
- 3. New TBG objectives / directions : discussion
- 4. Future TBG expeditions / trips
- 5. EWJ Tropical African hepatic flora (report)
- 6. Mosses and Liverworts of Uganda (report)
- 7. African Generic Flora (GBA) (report)
- 8. Any other business
- 9. Place & date of next TBG AGM

BBS TBG AGM 14 September 2002, Edinburgh Notes of Meeting

Present: Neil Bell, Tom Blockeel, Jeff Duckett, Nick Hodgetts, Liz Kungu, David Long, Royce Longton, Angie Newton, Brian O'Shea (notes), Roy Perry, Ron Porley, Michelle Price (chair), Herman Stieperaere, Martin Wigginton.

- 1. Notes of last AGM (see Newsletter 17). Accepted.
- 2. Action points from previous meeting: AP1. Brian O'Shea to email Herman Stieperaere about the decisions taken.

- AP2. Martin Wigginton to bring Roy Perry up to date on the state of the text, and to provide a copy.
- AP3. Brian O'Shea to copy to Roy Perry the current list of hepatic family coordinators.

 All three action points were completed, and were covered under the next item.
- 3. E.W. Jones' Liverwort and Hornwort Flora of West Africa. Roy Perry provided an outline of the activities over the last year. The flora has made very good progress, with Martin Wigginton making extensive revisions and updates to the flora, and Omer Van der Kerckhove providing many new plates. The current version of the manuscript (ca. 200 pages) and copies of the new plates were available for inspection, together with a 'mock up' of a few pages including text and illustrations. Proof-reading of the text is in progress.

In discussions during the day involving Martin, Roy, David Long (on behalf of RBGE to whom the text had been gifted) and Herman Stieperaere, it was agreed that it would be published in B5 size, in one volume, with illustrations interpolated in the text. It had been agreed that the book would be titled as shown in the heading for this paragraph, by Martin Wigginton and with collaboration from other authors as required. The idea of a two volume flora, including the option of having text and illustrations in separate volumes, had been rejected. It will be published by the National Botanical Garden of Belgium at Meise as a volume in the monographic series Scripta Botanica Belgica, in an issue of 300 to 500 copies. Although intellectual copyright would remain with

authors/illustrators, Meise would also be interested in publishing a second edition, if one were necessary, and the existing copies had been sold. The issue of cheap copies being made available for colleagues and institutions in the tropics was discussed but not resolved: even if copies were made available free of charge (with a related increase in cost for those sold at full price), postage costs on such a heavy item would be quite high. The price was not yet decided, and consideration was being given to seeking supporting funding for the publication. Herman hoped that the book would be ready to go to press in about a year, with publication about 4 months later.

Additional work is still needed on the text and on the addition of introductory chapters covering: the historical background; composition of the flora, habitats and conservation; general features of liverworts and hornworts; collecting; and a glossary. In addition there would be a photograph and biography of Eustace Jones, which Jeff Duckett agreed to write.

The production of the book has been a long process, but those at the meeting were full of praise for the final product.

4. Mosses and Liverworts of Uganda. Jeff Bates was unable to attend the meeting, but Brian O'Shea reported on behalf of the two assistant editors (himself and Nick Hodgetts). All families so far known in the Uganda bryophyte flora have been allocated to authors who will both research the family and identify all the specimens collected on the TBG Uganda expeditions. There are still authors waiting for specimens distributed, and attempts were being made to do this. It was thought that all undistributed specimens were now in the possession of Nick and Brian and would be distributed shortly, although there were also collections that were still with collectors, and would presumably not be available for study. This has meant that some authors have gone ahead without specimens and may therefore have to revise their accounts later, whilst others have delayed starting and as a result may not have time to complete their work by the deadline. The assistant editors would discuss this with Jeff Bates in relation to the target

completion date of April 2003. However, there are already families completed where specimens have been distributed, and it is expected that better progress will be made over winter when field work is out of the way.

- 5. GBA Guide to Bryophytes of Africa. Although this is not a TBG project, most of the participants belong to the group. About 50% of the contributions are complete, and good progress is being (or is likely to be) made on most of the outstanding families, although it is not clear yet whether work will be completed by the target completion date of June 2003.
- 6. Future TBG expeditions/trips. Three separate proposals were made for tropical trips.

Belize. Angie Newton proposed a two week trip in March 2005 to Belize. The London Natural History Museum has a field station there, and she suggested that around 12 to 15 people would be the most suitable number of participants. She and Fred Rumsey worked there for three weeks and despite there being an existing checklist they had found several families and genera new to the country particularly in the hepatics. Accommodation and transport should be fairly easy to arrange, and flights to Belize are comparatively cheap. Angie saw this as an ideal introduction to tropical bryology, whilst at the same time contributing to a little known flora. After some discussion, it was seen as something that should be put to the BBS at large, as an 'exotic' supplement to the existing BBS meetings, following the tradition set recently by Roy Perry.

Malawi. As was mentioned in Newsletter 17, following the completion of his PhD in Missouri, Zach Magombo has now returned to Malawi (Zach was a participant in our 1991 trip to Malawi). Brian O'Shea said that Zach is particularly keen to pursue field bryology, and to work towards a bryophyte flora for the country, although he has very little money available for fieldwork. As a result he would be very keen for us to arrange a second visit, and we could perhaps cover areas that we had not been able to visit before. Following the work we have done already, this seemed to be

natural progression to build on our previous work, as well as possibly to contribute to a future flora. Staff at Missouri Botanical Garden were also interested in contributing to both collecting and flora writing, but this would be likely to be pursued separately. There was some discussion about how this could be funded and progressed. Regarding funding, Brian O'Shea agreed to contact Dr James Seyani, Director of the National Herbarium and Botanic Gardens of Malawi at Zomba, currently on secondment to the Commonwealth Secretariat in London, and Jeff Duckett agreed to contact Association of Commonwealth Universities. It was thought also that there might be EEC money for such collaborative projects. It was also suggested that it would be an opportunity involve students from neighbouring countries in a bryology course, and the Stansfield Fund of the Linnean Society was also mentioned as a source of money for Africans to do work in Africa.

There was a positive feeling from the meeting that this should be pursued.

- AP1. Brian O'Shea to contact Dr James Seyani regarding funding of collecting in Malawi.
- AP2. Jeff Ducket to contact the Association of Commonwealth Universities regarding funding of collecting in Malawi. AP3. Michelle Price to contact Zach Magombo to discuss future trip/s.

South Africa. Now that Terry Hedderson is based in Cape Town, and is pursuing an active program of field work and bryophyte systematics, it was suggested that this might be a suitable location to visit with a more general audience of bryologists, who would be able to see a number of very unusual bryophytes, as well as visiting permanently wet forest and montane areas. Travel to and in South Africa is now quite cheap and there is plenty of tourist accommodation. Both the Drakensbergs and Cape Town were seen as suitable areas. Royce Longton offered to contact Terry Hedderson about this. The earliest such a meeting could be arranged would be 2004 or 2005, to fit in with the normal BBS meetings schedule.

- AP3. Royce Longton to discuss with Terry Hedderson the possibility of a meeting in South Africa.
- 7. Election of Executive and Coordinator. As Michelle Price was only just picking up her responsibilities as coordinator, she suggested that the current members be re-elected, and the organisation be reviewed as part of her remit (see item 2 of AOB). This was accepted.

8. Any Other Business.

- 8.1 IAB Meeting in Venezuela 2003. This meeting was announced and two or three of those present were already intending to attend.
- 8.2 Review of original objectives. Before the TBG was set up, a briefing note was produced by Martin Wigginton in 1988 outlining what the group could/should do, and detailing some possible projects. Michelle Price understood that most of these objectives had been pursued and completed, and it seemed appropriate with a change of coordinator to produce a review of what had been achieved by TBG up to 2002, and to consider whether the objectives were still appropriate and what direction should be taken in the future. Brian O'Shea as the previous coordinator would assist with this.
 - AP4. Michelle Price and Brian O'Shea to review the TBG objectives, and to produce a document for discussion at the next AGM.
- 8.3 **TBG** web site move. Michelle Price would like to take over responsibility for maintaining the TBG web site, and with agreement with RBGE, it was hoped that the TBG pages would be moved to Geneva. Although the new web site would have a different appearance, it would still be reached from the same link on the BBS web site, and would also return you to the same place.
- 9. Place and date of next AGM: London, 5th September 2003.

Action Points:

AP1. Brian O'Shea to contact Dr James Seyani regarding funding of collecting in Malawi.

AP2. Jeff Ducket to contact the Association of Commonwealth Universities regarding funding of collecting in Malawi.

AP3. Royce Longton to discuss with Terry Hedderson the possibility of a visit to South Africa.

AP4. Michelle Price and Brian O'Shea to review the TBG objectives, and to produce a document for discussion at the next AGM.

Brian O'Shea, September 2002.

Eustace Jones West African hepatic flora

This project is at last in its final stages. The whole text and 283 plates are completed, leaving only two plates yet to be drawn by Omer Van de Kerckhove. Unfortunately, we have not yet been able to see the voucher of Fossombronia indica or otherwise only one plate (Dendroceros africanus) would remain. The book will be ready for printing by the end of December.

Many thanks are due this year to Roy Perry for administrative help, and to the BBS for a grant to defray costs. For their various contributions to this work thanks are also due to Jeff Duckett and Roy for a biographical portrait of Eustace W. Jones, to Brian O'Shea for the chapter on collecting and preserving bryophytes, and to Alan Harrington, not only for chapters on the history of bryological collecting in West Africa and bryological habitats there, but also for a most thorough and painstaking proof-reading of the whole text. And, last but not least, to Omer for the fine illustrations, and Herman Stieperaere for his continued support. M. J. Wigginton

Future TBG expeditions/trips

BBS expedition to Belize (organiser Angie Newton): To be announced under the auspices of the BBS.

BBS expedition to South Africa (host Terry Hedderson): To be announced under the auspices of the BBS.

TBG expedition to Malawi (host Zach Magombo): Zach will be able to host a collecting trip as early as 2005-2006 and has suggested the following locations within

Malawi: Michesi Mountain (part of the Mulanje massif), Nyika Plateau (one of the two centres of plant endemism in Malawi), Ntchisi mountain, Vipya plateau and Zomba mountain. Zach will make all the appropriate arrangements within Malawi and can receive groups of around 10-12 individuals per trip. Zach and Michelle will continue to develop and plan this collaborative project.

(GBA) Guide to bryophytes of Africa

Good progress is being made with GBA, although the number of completed families sent to the editors is still only 68% of families and 55% of genera. Progress details are shown on the Tropical Bryology Reserach (TBR) web site http://www.oshea.demon.co.uk/tbr/, together with copies of the text of all the 35 accepted moss families. All but three of the 24 authors have either completed their contributions, or have them underway, and editors hope to start soon on the introductory material. Brian O'Shea

Mosses and Liverworts of Uganda (MALOU)

The first few families are now completed, and copies of the treatments should be on the TBG website by the time you receive this The original target date was Newsletter. extended to August 2003 because of delays caused by the late distribution of many specimens, but it is expected that not all authors will achieve this date, as significant revisionary work is required in some families. Some authors found the required quality of illustration beyond them, and asked for assistance. The BBS Bequest Committee were approached and funding was received to cover 70 plates. Malcolm Watling was asked to undertake the illustrations. Brian O'Shea

Malawi and Uganda collections

Intermittent activity continues on the Malawi collections, and several papers are well under way, but further progress is limited by the lack of revisionary studies in many families. Unidentified specimens amount to 37% of the total collected, and these are being held back in the hope that taxonomic work will take place for the families and genera so far not covered. The current position is shown on the TBG web site (see http://www.nhm.ac.uk/hosted_sites/bbstbg/ or take the link from the BBS web site).

Uganda collections are currently with the authors of the forthcoming *Mosses and Liverworts of Uganda* (MALOU). Many new records for Uganda will be published shortly, based on feedback from authors. *Brian O'Shea*

Report: 5th Tropical African Bryological Training Course

This training course, organised by Min Chuah-Petiot, was held at the Department of Botany, University of Nairobi, Nairobi, Kenya from 27th January until 9th February, 2003. The workshop was sponsored by UNESCO and brought together experts and participants from diverse countries. Among the African participants were three people Madagascar, one from Tanzania, and one from Zimbabwe. The workshop included lectures on various aspects of bryology including the systematics of mosses and liverworts; biodiversity, ecology and distribution; their role in conservation and maintenance of tropical ecosystems; composition of tropical bryofloras; and bryophyte dispersal, endemism and disjunction. During the workshop a fiveday field trip to Western Kenya was undertaken and included collecting in: 1) Malava forest, and Yala Forest, these forest patches comprise the Kakamega forest which represents the eastern most remnant of the lowland Guinean-Congolan forests; 2) the southern sub-montane forest of the Kenyan side of Mt. Elgon near Kimilili; and 3) on rock outcrops near Bungoma. Tamas Pócs was the guest tutor.

Additions to the BBS-TBG website

The TBG documents are now available on a separate TBG web site that is currently being hosted by the Natural History Museum, London at: http://www.nhm.ac.uk/hosted_sites/bbstbg/ or it can be reached via the new BBS home page under the menus 'Bryological Portal' or 'Activities.' Unfortunately delays in the development of the 'Cryptogamie' website in Geneva have meant that the TBG website has not undergone the planned move and revision. Michelle will attempt to develop the 'Cryptogamie' site at G, and the new TBG site in 2004.

The following additions have been made to the TBG website since the publication of the last newsletter:

- 25 August 2002 Update and reformatting of *Mosses and Liverworts of Uganda* pages
- 26 January 2003 'Mosses and Liverworts of Uganda' pages updated with revised moss list
- 29 January 2003 'Mosses and Liverworts of Uganda' pages updated with revised hepatics list
- 6 March 2003 Malawi checklist updated to include all published data.
- 23 March 2003 New (interim) version of TBG web pages created, awaiting revamped version.
- 7 April 2003 New (interim) TBG website loaded as a hosted site at Natural History Museum,
- 7 April 2003 MALOU: Instructions for Authors updated to agree with latest document distributed to authors.
- 4 June 2003 Addition of link to newsletters.
- 9 June 2003 East African Bryophytes' series: three recent papers added.
- 27 July 2003 List of publications all publications now categorised; MALOU update of family treatments received.

News of members

Min Chuah-Petiot continues her work on the bryophytes of Kenya. She participated in a collecting trip to Zahamenia forest, Madagascar, in December of 2002. She also collected in Bukit Larut, Malaysia, in August of 2003. Min organised and participated in the 5th Tropical African Bryological Training

Course held in Narobi, Kenya earlier this year (see report above for more details).

David Long has recently submitted his revision of Asterella for Flora Neotropica, which will appear as part of the treatment of Marchantiales edited by Helene Bischler.

Frank Muller spent three weeks in February on Bioko (Fernando Póo). He reports that trip was very successful and it was possible for him to visit the highest mountain of the island, Pico de Malabo, ca. 3000 m. The bryophyte flora of this mountain was poorly known. composition of the bryoflora was found to be very similar to Mt. Cameroon and the East African Islands. Nearly 80% of his collections are now determined. Among the species found there are nearly half new for the island, many are new for West Africa, one genera is new for sub-Saharan Africa (Micromitrium), and a few are new for science (a Cephaloziella and a Breutelia species). At present Frank is also continuing his work on his collections from Rodrigues (East African Islands) and a treatment of the liverworts of this island is now in press (written with Tamas Pócs). Frank is collaborating with Ron Pursell on a short manuscript on the Fissidens flora of New Caledonia, which will include the description of a new species.

Professor Mark Seaward (University of Bradford) together with Len Ellis, Tamas Pócs, Brian O'Shea and Martin Wigginton are currently preparing papers on bryophytes of Indian Ocean islands based on collections made during expeditions to the Chagos Archipelago and the Seychelles in 1996 and 2000 respectively. Although these expeditions concentrated on the lichen floras of these islands, the opportunity was taken to collect significant numbers of bryophytes.

Tamas Pócs continues with his research on tropical bryophytes, specifically on tropical hepatics and the African Bryoflora (see series 'East African Bryophytes'). Last spring he spent some time with his wife in Tunisia along the northern edge of Sahara desert where they collected bryophytes and studied the cryptobiotic crust and cryptogamic

communities of the region. In August-September of this year he will spend five weeks on a collecting trip in Fiji. His research and the bryology research group based in Eszterházy Teachers College, Eger, Hungary will be featured in the next volume of the TBG newsletter under 'Bryophyte Research News.'

Bryophyte Research News from the University of Göttingen (GOET) S. R. Gradstein.

The research at GOET focuses mainly on systematics, biogeography and ecology of bryophytes, especially from tropical America. The University supports a large student orientated bryology research group. Members are involved in both national and international collaborations, especially within Costa Rica, Bolivia, Brazil, and Ecuador. Systematics and biogeography: research is being carried out on the large liverwort families Lejeuneaceae (Elena Reiner-Drehwald, Anna-Luiza Ilkiu Borges of Belem, Brazil and the recently graduated doctoral students Gabriele Weis. and Gregorio Dauphin); Plagiochilaceae (Jochen Heinrichs, Micheal Sauer (Natural History Museum of Stuttgart, Germany), and Henk Groth, in collaboration with the research group of Rudiger Mues at Saarbrücken, Germany, and David Rycroft at Glasgow, UK); and Jubulaceae (Jaime Uribe (Bogotá, Colombia)). Some of the long-term goals of are the production of monographs for Flora Neotropica, and the analyses of phylogenies of these groups on a world-wide basis, using morphological, chemical and molecular data. They are also actively involved in writing catalogues and identification manuals for tropical liverworts to enhance the study of these organisms, which are less wellknown than the tropical mosses due to the lack of appropriate identification tools. Molecular Lab.: Since 2001 a new, well-equipped lab for molecular-systematic studies has established at GOET and protocols have been worked out for sequencing of herbarium specimens of leafy liverworts. We are planning collaborations with research laboratories interested in joint molecular-phylogenetic

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studies of the leafy liverworts. Catalogue of Liverworts of Bolivia: In the framework of the partnership between the Universities of GOET and La Paz, supported by the German Academic Exchange Office (DAAD), a first catalogue of the liverworts of Bolivia was prepared together with Rosa Isela Meneses from the National Herbarium in La Paz (LPB). Bolivia has a very rich flora but knowledge of its hepatic diversity has been hampered by the poor work of Franz Stephani who described the same species from Bolivia over and over again under different names. More than 1000 species of hepatics have been recorded; in our catalogue we accept no more than 415 (in 100 genera and 32 families). About 425 species recorded from Bolivia are synonyms and 235 are rejected as erroneous or doubtful records. Ecology: research has focused on the human impact on the bryophyte diversity of Neotropical rain forests and is being carried in Costa Rica (Ingo Holz), Ecuador (Nicole Nöske, Meike Andersson, Timo Kautz) and Bolivia (Carola Acebey, Thorsten Krömer). They are particularly interested in the question - how is the rich epiphytic diversity of the tropical forests affected by anthropogenic disturbance and what are its chances for recovery following deforestation. They are also interested to learn more about the possible usefulness of the tropical epiphytes as biological indicators, to identify different levels of forest disturbance.

New members/Change of address

Christine Cargill was awarded her Ph.D. from Southern Illinois University at Carbondale, Illinois, U.S.A. in May 2001. Her thesis was entitled: A taxonomic revision of Fossombronia and Sewardiella, suborder Fossombroniineae (Marchantiophyta, Metzgeriidae) within the continent of Africa, Southwest Asia and the sub-continent of India. Christine is now the curator of cryptogams at the Australian National Herbarium, in the Centre for Plant Biodiversity Research in Canberra, Australia. The cryptogam herbarium is currently based in the Australian National Botanic Gardens in Canberra. Her interests extend beyond the

Fossombroniineae and into the hornworts and the thalloid liverwort genus *Asterella*.

Tropical Bryology

Vol. 23 was published in 2003 and comprises the Manual of Bryology by J.-P. Frahm, with contributions from Brian O'Shea, Tamas Pocs, Timo Koponen, Sinikka Piippo, Johannes Enroth Penchang Rao and Yin-Ming Fang. It covers the diversity, origin, morphological adaptations, ecology, ecophysiology and phytogeography of bryophytes in the tropics. This publication also includes information on the collection and identification of tropical material, a list of regional checklists, information on the use of computer and camera equipment in the tropics and a select bibliography of literature on tropical bryophytes.

Contact Jan-Peter Frahm (frahm@unibonn.de) to become a subscriber - usually around £10 per volume. There is a web page for the journal: http://www.unibonn.de/bryologie/tb.htm

TBG Noticeboard

WANTED: Specimens of Diplasiolejeunea albifolia (from Africa) as well as further specimens of Diplasiolejeunea (det. or indet.) from Africa and Asia, preferably as small duplicates, but also on loan, for studies of infra-specific variability [this search is directed towards private collections - loans from institutions have been asked for separately]. Contact Alfons Shäfer-Verwimp by email: Moos.Alfons@t-online.de

Bryophytes of Kenya: Min Chuah-Petiot's book on the bryophytes of Kenya, announced in the last Newsletter, is now being edited and will go to the printers shortly. Further information will be distributed when details are available.

Amblystegiaceae (Musci) by Lars Hedenäs in *Flora Neotropica* Vol. 89. 2003. This work, soon to become available, treats the

Amblystegiaceae in a broad sense. It includes 42 species representing 20 genera, and keys are provided for both genera and species. Maps of the neotropical distributions are included for all species, and each genus is illustrated by drawings of representative species.

Index Hepaticarum: In spring of 2003 Michelle Price and Anne Streiff began work on the final volume in the series of second editions of Index Hepaticarum (A-Jubula), a project based at Conservatoire et Jardin botaniques (G). It is hoped that this final volume will be ready for publication at the end of 2004. A searchable database containing all hepatics names published from 1 May 1753 to 31 December 1973 is planned and will be accessible through the website for G. Hepatic names published after this date are available through the W³MOST-TROPICOS database at Missouri Botanical Garden.

Manual of the liverworts and hornworts of Brazil: Rob Gradstein and Denise Pinheiro da Costa have produced the first hepatic Flora for a part of tropical America (currently in press, New York Botanical Garden). It contains keys and illustrations to more than 600 species (139 genera and 38 families) and is a companion volume to the "Guide to the Bryophytes of Tropical America" mentioned in TBG Newsletter (Vol. 17). Many specialists provided generic treatments, e.g., Gregorio (Ceratole jeunea), Xiao-Lan Dauphin (Trachylejeunea, Xylolejeunea), Tamás Pócs (Aphanolejeunea, Cololejeunea), Elena Reiner-Drehwald (Lejeunea), Alfons Schäfer-Verwimp (Diplasiolejeunea), Jiri Váňa (Anastrophyllum) and K. Yamada (Radula). Aline Souza de Oliveira and Elena Reiner-Drehwald illustrated the work, which was supported by Volkswagen-Stiftung, the Brazilian Conselho Nacional de Desenvolvimento Cientifico e Tecnológico (CNPa). and several private Brazilian foundations.

TaxLink program: (GOET and Bundesamt für Naturschutz, Bonn). TaxLink has been developed at the request of the Bundesamt für Naturschutz (Bonn) and it allows for a detailed visualization of comparisons between

different taxonomic concepts or "taxonyms." TaxLink may store taxonyms with their references, synonyms, relationships between taxonyms, and nomenclatural status of names. Information can be vizualized on screen, printed, and retrieved as a text document. Information on the availability of TaxLink may be obtained from the Bundesamt für Naturschutz, Konstantinstr. 110, 53179 Bonn, Germany. See:

Gradstein, S.R., M. Sauer, W. Braun, M. Koperski & G. Ludwig 2001. TaxLink, a program for computer-assisted documentation of different circumscriptions of biological taxa. Taxon: 1075-1084.

IAB Congress, Mérida, Venezuela.

The IAB Congress in Merida, Venezuela will now be held in January of 2004. View the congress site: http://www.ciens.ula.ve/~bryomeri/or contact Yelitza León (yeltleon@ciens.ula.ve) for further information. Deadlines for abstract submission: 1 October 2003. Registration: (professionals) 100 USD before October 31, 2003 120 USD afterwards; (students) 80 USD before October 31, 2003, 100 USD after.

New Bryology Websites

The Latin American Bryological Society has a new web site containing general information on the Society and its bulletin BRIOLATINA. See: http://www.briolat.org

Books

Bruce Allen. 2002. Moss Flora of Central America, Part 2. Dicranaceae to Orthotrichaceae. Missouri Botanical Garden Press.

See Missouri Botanical Garden Press: http://ridgwaydb.mobot.org/mbgpress/

William R. Buck. 2003. Guide to the Plants of Central French Guiana. Part 3. Mosses. Memoirs of The New York Botanical Garden Volume 76(3).

See: New York Botanical Garden Press at http://www.nybg.org/bsci/spub/catl/

Gao Chien & Marshall R. Crosby (Editors-in-Chief) Si He (Editor). 2003. Moss Flora of China, English Version, Volume 3: Grimmiaceae through Tetraphidaceae. Co-published by Science Press (Beijing) and MBG Press (St. Louis).

See Missouri Botanical Garden Press: http://ridgwaydb.mobot.org/mbgpress/

If anyone is aware of, or has published / reviewed other books of interest to TBG members, please send the details, book titles or your reviews to the TBG coordinator (address below).

Publications

Bytebier B & Chuah-Petiot M. 2002. A preliminary checklist of the bryoflora of the Taita Hills, Kenya. *Tropical Bryology* 22: 55--66.

Chuah-Petiot, M. & T. Pócs. 2003. East African Bryophytes XIX. A contribution to the Bryoflora of Kenya. Acta Botanica Hungarica 45 (1-2): 53-64.

Gradstein, S. R., R. I. Meneses Q. & B. A. Arbe. 2003. Catalogue of the Hepaticae and Anthocerotae of Bolivia. *Journal of the Hattori Botanical Laboratory* 93: 1--67.

Heinrichs, J. 2002. A taxonomic revision of Plagiochila sect. Hylacoetes, sect. Adiantoidea and sect. Fuscoluteae in the Neotropics with a preliminary subdivision of neotropical Plagiochilaceae into nine lineages. Bryophytorum Bibliotheca 58: 1--184.

Wigginton, M.J. 2002. Checklist and distribution of the liverworts and hornworts of sub-Saharan Africa, including the East African Islands (version 1, 2/02). Tropical Bryology Research Reports 3: 1--88.

Announcements

The Geneva "Société de Physique et d'Histoire naturelle" (SPHN) is pleased to announce that in 2004 it will award a prize in Botany called: AUGUSTIN-PYRAMUS DE CANDOLLE PRIZE, which will recognize the author or co-authors of the best monograph on a genus or family of plants. Monographs to be considered should be recently produced and may either be unpublished or published after December 31 2001. Two copies of the manuscripts, along with the author's curriculum vitae, must be submitted to the following address before March 31, 2004: Augustin-Pyramus de Candolle Prize, Conservatoire et Jardin botaniques de la Ville de Genève, CP 60, CH-1292 Chambésy/GE, Switzerland. See website of Conservatorie et Jardin Botaniques (G): http://www.cjb.unige.ch/

Contributions to TBG newsletters / website

The TBG newsletter relies heavily on contributions from members, especially for the section 'news of members,' and for information on bryological research carried out by members. Please send contributions to future TBG newsletters to Michelle Price (see email address below) throughout the year.

The coordinator is also seeking contributions to the TBG website: these can be as keys/treatments to tropical genera, travelogues of field trips, pictures of topical bryophytes, interesting finds, or details on research activities of members.

Coordinator: Michelle J. Price,

Conservatoire et Jardin botaniques de la Ville de Genève, Case Postale 60, CH-1292 Chambésy-GE, Switzerland. Tel: 022 418 5148 (International +41 22 418 5148) email: Michelle.Price@cjb.ville-ge.ch

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BRITISH BRYOLOGICAL SOCIETY

TROPICAL BRYOLOGY GROUP NEWSLETTER

Edited by Michelle J. Price

No. 19 August 2004

Riclef Grolle, 1934-2004

Riclef Grolle, one of the most respected hepaticologists of his generation, and a long-standing member of the TBG, died on 12 June 2004, shortly before his 70th birthday. Although he was crippled by polio whilst still in his teens, he was an active hepaticologist for his whole career, working at home as an employee of the University of Jena. As well as being supportive of the TBG at its initiation, members will also have met him at IAB meetings, where he showed a great interest in meeting people who he had known previously only through correspondence and publications. Full appreciations of his life and work will be published elsewhere, and have already appeared in Cryptogamie, Bryologie 25(3): 203-204 and Bryological Times 113.

Annual General Meeting

The next TBG AGM will be at the *BBS AGM* and *Bryological Symposium* to be held in Preston Montford, 8-10 October, 2004 (for meeting details contact Mark Hill. Tel. +44(0)1487-772400 or email: moh@ceh.ac.uk). The TBG AGM meeting itself will be held on 9th October at 19.15.

TBG AGM AGENDA

- 1. Notes of last AGM
 - 2. Matters arising
- 3. New TBG objectives
- 4. Future TBG expeditions / trips
 - 8. Any other business
- 9. Place & date of next TBG AGM

BBS TBG AGM 6 September 2003, Queens College, London Notes of Meeting

Present: Tom Blockeel, Jeff Duckett, Len Ellis, Jonathan Graham, Alan Harrington, David Holyoak, Nick Hodgetts, Liz Kungu, David Long, Howard Matcham, Brian O'Shea (notes), Roy Perry, Ron Porley, Chris Preston, Michelle Price (chair), Robin Stevenson, Herman Stieperaere, Martin Wigginton.

Apologies: Angie Newton, Royce Longton

1. Notes of the last AGM meeting (see Newsletter 18). Accepted.

2. Matters arising

AP1. Brian O'Shea to contact Dr. James Seyani regarding the funding of collecting in Malawi. Dr. Dr. Seyani has been emailed but no reply was received. A second email address had now been found for Dr. Seyani and he would be contacted again.

AP2. Jeff Duckett to contact the Association of the Commonwealth Universities regarding funding / support for collecting in Malawi.

AP3a. Michelle Price to contact Zach Magombo to propose a TBG trip to Malawi and to discuss any future trip or trips. Completed. A positive response was received suggesting that two trips of up to 12 people would be possible. Michelle will continue to liase with Zach to develop this. See discussion below regarding the future trip.

AP3b. Royce Longton to discuss with Terry Hedderson the possibility of a visit to South Africa. Terry replied positively with suggestions of several different locations for trips, and mentioned 2005 as a possible date. It was thought that this could act as a 'popular' introduction to a more exotic bryoflora, of interest to a wider BBS membership as well as to the members of the

TBG. Unfortunately Terry has not been able to confirm a date with Royce and this cannot trip be confirmed in time for the next Bulletin (for a 2005 trip).

AP4. Michelle Price and Brian O'Shea to review the TBG objectives and to produce a document for discussion at the next TBG AGM. Completed. The review document was made available on the TBG website (document no. 66), and is discussed in more detail below (article 3). Howard Matcham suggested that it would make a useful contribution to the Bulletin as an advert for TBG.

AP1. Michelle to make ready a summary article for the *Bulletin*

3. New TBG objectives / directions: discussion. Michelle introduced the document which had been sent out to the TBG executive and members before the meeting. The document was accompanied by an outline of future directions of the TBG with discussion points and questions. After a general discussion of the options outlined it seemed clear to the TBG members at the meeting that nothing should be ruled out at this stage. It was generally agreed that since a lot of experience had been gained by TBG members for the African bryophyte flora the main thrust of the TBG should be continue in this direction, with future efforts building on what has already been achieved. At this point, given the commitments of the most active TBG members, it was felt that tackling a project like Bryologia Africana would be too ambitious an aim. However:

- 1) Further work in Malawi would be an obvious next step for the TBG group given the success of the first trip and the presence in Malawi of a bryologist
- 2) Further work in Uganda would also be a possibility
- 3) Madagascar (already, in part investigated by researchers at G and MO for vascular plants)
- 4) Réunion (the late Theo Arts had already done much work on this flora, which could be consolidated and pursued).
- 5) Belize at the BM field station might be a possible joint TBG-BBS excursion introducing the bryophytes of tropical America
- 6) South Africa was another possible way of generating more interest in tropical bryophytes in a wider BBS audience.

In view of this no options will be turned down until more concrete proposals are drawn up.

Michelle continued by discussing the future development of the website which is well behind schedule due to her other commitments. It was considered important to make the TBG website a comprehensive resource for tropical bryophyte work, particularly on Africa.

- 1) One possibility would be to keep adding revised genera to the website (as an interim substitute for *Bryologia Africana*), and updating the literature and keys.
- 2) There was a strong feeling that the lack of literature was the single most important limitation to research efforts both in the UK but more significantly in African countries. For UK researchers literature was difficult to come by for those people not working in an research institute where journals are more readily available. It was felt that an update of the O'Shea article would be a welcome addition to the website as would more information on literature generally (including more free access to literature).
- 3) Following the acquisition of the library of Alan Crundwell by the BBS library has a large collection of reprints, however these are not catalogued in anyway at present.

AP. Brian O'Shea to contact Ken Adams, with a view to checking the coverage of African / Tropical subjects in the BBS library and this information to be made available on the TBG website.

- 1) Similarly an update of Greene & Harrington (1988, 1989) would be a great help to members in highlighting regional and new taxonomic literature. Although the new additions to this work would be a major task it was suggested by David Long that it might be possible to convert the manuscript to a word processed format as for WAFLO, where a number of people took specific families, and to type for the EW Jones manuscript. Although a time consuming task it was considered to be important to attempt to update this work.
- 2) It was thought that none of these web/databasing tasks were likely to attract funding, which would be another way of encouraging people to attempt these tasks. David Long suggested that this might be possible as a part of an African project and presented in terms of 'repatriation of data' returning to Africa the literature that is needed to work on the flora.

Michelle concluded by discussing the need for / encouragement of more students into the TBG, and the issue of involving more students in Bryology. A degree of pessimism was expressed mainly focussing around the impression that 'Bryology' was not seen as an interesting option for students, particularly since it and botany in general seems to receive a low profile in

teaching. The lack of undergraduate tuition in bryology / botany means that there is no longer a route through which bryologists develop.

4. Future TBG expeditions / trips. Malawi was seen as the most promising possibility at present. To gage opinion on this a show of hands was requested to see what the interest would be in this albeit small representation to the TBG membership. The following responded positively, M. Wigginton, N. Hodgetts, R. Porley, M. Price, B. O'Shea, D. Long, L. Kungu, L. Ellis. A costed proposal, and approaches towards potential funding organisations (National Geographic, Darwin Initiative, Commonwealth Institute), was needed. Workshops might be an addition to TBG activities worth considering, and funding for a follow up flora. It was decided that three weeks was a suitable duration for a collecting trip since most TBG members do not get academic length vacations and would have to use their private vacation time. It was noted that as much advance warning of a trip as possible was important so that people could make the necessary arrangements with their work places and families. Also that someone would need to go to Malawi in advance of the trip to make and necessary arrangements locally and make sure that all was

AP. Michelle Price to contact Zach Magombo over possible future trip/s to Malawi.

5. EWJ Tropical African Hepatic Flora (report). This topic was discussed during the BBS AGM. Following the completion of the illustrations by Omer Van der Kerckhove, and the detailed work of Martin Wigginton, Herman Stieperaere said that he hoped this volume would go to press in December of this year (2003).

Due to lack of time the following agenda items were not covered:

- 6. Mosses and Liverworts of Uganda (report)
- 7. African Generic Flora (GBA) report
- 8. Any other business
- 9. Place and date of the next TBG AGM will be 9th October 2004 at Preston Montford.

Contributions to TBG newsletters

The TBG newsletter relies heavily on contributions from members, especially for the 'news of members.' and information on bryological research activities, information on publications and for any features included.

Please send your contributions for future TBG newsletters, at any time, to Michelle Price (see email address at end).

Report: IAB Congress, Mérida, Venezuela.

The IAB Congress in Mérida, Venezuela was held from 10-19 January of 2004 and located at the Universidad de Los Andes. The meeting, was hosted and organised by Yelitza León Vargas, Ricardo Rico and a team of staff and students from Centro Jardin Botanico and Universidad de Los Andes (Alicia Bohórquez, Maria Silvina Ussher, Fransisca Ely Bali, Rosa Pabon, Jimmy Morales and students including Yolanda Cáceres, Sol Gonzales, Erik Hernández) based in Mérida. A big thank you and a congratulations is due to the Mérida team for organising such a successful IAB congress.

This congress meeting proved to be both extremely enjoyable and very stimulating with presentations on bryophyte molecular phylogenetic studies, taxonomy, systematics, florisitics, ecology, anatomy and development, history and bryo-informatics delivered over the five day conference period. There were over 60 participants at the congress from over 20 countries, including Brazil, Colombia, Mexico, Panama, Puerto Rico and Venezuela from Latin America. Two pre-congress workshops were held. One was on Bryophyte Conservation run by Tomas Hallingbäck and the other, conducted by Robb Gradstein, on the Lejeuneaceae.

A visit to the Botanical Garden in Mérida allowed participants to see for themselves the project underway there to re-create a montane forest environment. This successful project was started with a view to providing a setting for education about local forests, and for the conservation of them.

A field trip to a local forest site Monte Zerpa was held mid-way through the conference and this excursion gave people the opportunity to visit, many for the first time, a tropical forest site. Two full day field-trips were held after the congress taking participants to two spectacular locations: the Podocarpous montane cloud forest called 'La Carbonera,' and to the páramo and Polylepis forest around Laguna Negra (Páramo de Mucubaji, Sierra Nevada National Park). Both days provided participants the chance to experience two very different habitats, and the varied bryophyte and tracheophyte species that inhabit them.

The Mérida IAB congress was a fantastic opportunity to discover the wide range of bryological research currently being conducted worldwide, to meet up with international colleagues, to make new contacts and connections, and generally to experience the hospitality and beauty of Venezuela and the Venezuelan people. *Michelle Price*

Eustace Jones West African hepatic flora

I should like to thank all the BBS and TGB members who contributed to this project, without whose collective efforts the book would not have come to fruition. Herman Stieperaere has been indefatigable at the Brussels end, allocating a great deal of his time to this project, overseeing the preparation of drawings and steering the book through to production. Early on, Robb Gradstein, Riclef Grolle and Tamás Pócs commented on Eustace's text and made suggestions for improvement. Special thanks to David Long for help in numerous ways, to Alan Harrington for chapters on the history of liverwort collecting and habitats in West Africa, for reading a late draft of the whole book and making many suggestions for its improvement, to Brian O'Shea for the chapter on collecting and processing bryophytes, and to Jeff Duckett and Roy Perry for a short biography of Eustace Jones. For the initial laborious task of typing Eustace's manuscript into a computer file thanks are due to: Richard Fisk, Nick Hodgetts, David Long, Peter Martin, Roy Perry, Liz Pickles, Michael Proctor, Brian O'Shea, Tony (AJ) Smith, Robin Stevenson, Mike Walton and Peter Wilberforce. M.J. Wigginton

Eustace Jones West African hepatic flora Details and purchasing information

The 441-page book is published as a volume (Vol. 30) in the *Scripta Botanica Belgica* series, and is produced by the Jardin Botanique National de Belgique, Meise, on a non-profit making basis. Broadleaf Books is the UK supplier of the work. The book will cost £26.50 plus postage and packing. Buyers will be invoiced and payment must be by cheque in GBP drawn on a UK Bank or by bank transfer. Visa payments are not accepted. Buyers who have a euro / US dollar or other currency bank account may prefer to obtain the book from their usual non-UK supplier, but if they find this difficult they should email us (below) and ask for terms.

Roy & Hilary Perry, Broadleaf Books, 35 Cardiff Road, DINAS POWYS, Vale of Glamorgan, CF64 4DH, UK Tel.: +44 (0)29 2051 3382; email: broadleafbooks1@aol.com

This book is the first fully illustrated and complete identification guide to West Africa (Mauritania to Cameroon and Rio Muni and the Gulf of Guinea Islands). It contains keys and descriptions of the 30 families, 84 genera and 297 species of liverworts and hornworts recorded from the region, all illustrated on 285 plates. The flora also provides an introduction to the morphology of these plants and explains how to collect and study them. Not only is it a valuable source of information on the relationships and the morphology of the 297 species treated, but it also gives data on habitat and distribution which will be useful for ecologists and conservationists alike. Illustrations of about 50 species of hepatics, for which there were no adequate published illustrations of African material, have been prepared by Omer Van der Kerckhove, botanical illustrator at the National Botanic Garden of Belgium.

Dr Eustace Jones (Jonah to his friends), a lecturer in the Forestry School, University of Oxford, collected hepatics extensively in Africa, often during his forestry work there. He published more than 70 bryological papers, over 40 of which were devoted to African hepatics. He worked for many years on the West African hepatic flora, but died in 1992, before he could complete it, leaving a draft manuscript of keys and descriptions.

Martin Wigginton has edited the text of the flora and brought it into line with the most recent literature, extending the area covered by the flora far beyond the Gulf of Guinea. It is thanks to him that Dr Jones's Flora will now see the light of day. *Roy Perry*

MALOU Progress

The Mosses and Liverworts of Uganda Flora has finally hit the bookstands, with the first contribution appearing in *Journal of Bryology* 26(2): 147-151. The initial intention to produce a book proved to be unsuccessful, with very few contributions being received by the deadline, but Jeff Bates (senior editor) was able to arrange that future volumes of *J. Bryol.* would contain a MALOU family treatment in each issue. I think we are now in double figures for completed families, although some are still awaiting

illustration: we are grateful to the BBS for providing funding for some of the illustrations.

Where we go from here is undecided. I would like to see each family contribution made available on the web, to bring them all together in one place, preferably looking as close as possible to the original publications, but this of course will require investigation. The current instructions to authors also needs revising to reflect the new publication method, and hopefully the website will be updated over the summer. *Brian O'Shea*

Publication of Mosses and Liverworts of Uganda (MALOU)

Publication of the 'Bryophyte Flora of Uganda' will begin in Journal of Bryology in serial form in Volume 26. The first publication in the series will be the Jungermanniaceae, followed by the Gymnomitriaceae. Foreseen for volumes in the near future are the Lophoziaceae (J. Vána with illustrations by M. Watling); Hypnaceae, Hylocomiaceae and Rhytidiaceae (L. Hedenäs); Fissidentaceae (M. Bruggeman-Nannenga); Plagiotheciaceae (R. Ochyra & B. O'Shea) and Dicranaceae (J.-P. Frahm & C. La Farge). We hope to publish one family or family group per issue of the journal. There will also be keys to families and other related articles in due course. Jeff Bates

The BBS-TBG website

In the hiatus between development of the Website 'Cryptogamie' at Geneva and subsequent move of the TBG website to it Brian O'Shea re-designed the BBS TBG website. The TBG website is currently hosted by the Natural History Museum, London and can be reached via the BBS home page under the menus 'Bryological Portal' or 'Activities' or directly at: http://www.nhm.ac.uk/hosted_sites/bbstbg/

This new look TBG site is easy to navigate and it provides quick access to the TBG documents / newsletters / publications, MALOU project information, on-line keys, TBG progress reports, TBG membership list and links to three other websites / projects of particular interest: Tropical Bryology Research; Guide to bryophytes of Africa (GBA); Checklist of mosses of North

In addition to the re-design of the TBG website the following additions have been made to it:

1) Newsletter Volume 18.

- 2) New objectives and directions for TBG ? (Aug 2003) (publication no. 66)
- 3) Link to Dixon Type Specimen Project

Contributions to the TBG website: The coordinator is seeking contributions to the TBG website. Contributions can be as keys/treatments to tropical genera, travelogues of field trips, pictures of tropical bryophytes, interesting bryological finds, details of research activities of members, or as links to published works on-line from other project or institutional websites.

News of members

Min Chuah-Petiot: After the publication of her book *Mosses and Liverworts of Kenya* in November of 2003 (details below) Min was involved in several bryophyte collecting trips: 30th March to 3rd April 2004 - field collecting trip to the Taita hills, Kenya within the context of the Sixth Tropical African Bryology Training course); and, 19th July to 2nd August 2004 - expedition to Madagascar with Prof. Pócs. Collection of bryophytes from the Inselbergs between Antsirabe and Fianaratsoa and in Ranomafana National Park

Min attended the IAB Congress in Mérida, Venezuela in January of 2004 and then organized and presented the Sixth Tropical African Bryology Training Course in the Department of Botany, University of Nairobi, Kenya from 29th March to 2nd April. Prof. Pócs was guest tutor. Participants: Dr. Olubukunola Oyesiku from Nigeria, Mr. Itambo Malombe from the Herbarium, National Museums of Kenya, Mr. Henry Muchura and Ms. Eunice Githae, both post-graduates from the University of Nairobi.

Patxi Heras, together with Marta Infante and Dan Norris, spent a month in the summer 2003 in Equatorial Guinea, supported by a grant from National Geographic Society. The objective of this work was investigating the Inselbergs in the interior of the Continental Region (Río Muni), as well as the forest in the surrounding areas.

In Equatorial Guinea, Inselbergs are un-forested areas on granitic domes dominated by various poikilohydric vascular plant species especially in the Poaceae and Cyperaceae. Climbing to the top of these hills offers the only opportunity of escaping from the claustrophobic and dark interior of the forest below and gives the most beautiful view over the green "sea" of the canopy.

Africa.

These islands provide refuge to heliophyllous and xerophyllous plant species that could have colonized the area during the late glaciation in the Pleistocene, when the African rainforest reduced and fragmented to the benefit of the savanna.

We were able to visit seven Inselbergs of different types. Species diversity in the rocky open areas of the Inselbergs seems to be low, but radically different from the floristic composition of the surrounding forest. Remarkable is the concentrated presence of species in the Dicranaceae and Bryaceae in a country where these two moss families have very few representatives. We noted the absence of typically aquatic species in the Sphagnaceae and Amblystegiaceae. which were wrongly mentioned in the non-specialized botanical bibliography that exists for the country. From our collections so far, we can also say that some of the Inselberg bryophytes are able to colonize disturbed areas by roads and some others are shared by the photic zone in the surrounding forest canopy. The presence of montane, eastern African species is also expected. Patxi Heras and Marta Infante

Michael Proctor: I was in Trinidad for a fortnight in October, staying at 'Simla' (the house above Arima built as a country retreat for the Governor in the early 1900s, and later owned by the eminent Dr William Beebe and the New York Zoological Society) and spent some time doing desiccation compensation-period experiments with Papillaria (Meteorium) nigrescens and a small Plagiochila from the forest on the Northern Range - to which I have since added some lightresponse and desiccation experiments on the Papillaria back in the lab here. The IAB meeting in Merida gave me the opportunity to get lightresponse curves for Monoclea gottschei, a Cyathodium sp., Pogonatum semipellucidum, Phyllogonium fulgens and (cf.) Meteoridium remotifolium, and revived dry material has provided some light-response and/or desiccation data for Prionodon densus, Frullania convoluta, Pilotrichella flexilis, Polytrichum juniperinum (!), Hedwigia ciliata, Pogonatum perichaetiale and a Polytrichadelphus species. So considering I made a resolution not to collect (on the grounds that I already have far too many undetermined bryophytes waiting to be looked at) it was quite a profitable trip. Non-bryologically, I found two Hymenophyllum spp. and two Trichomanes spp. in both Trinidad and Venezuela, with only one of the Hymenophyllum species in common, so a bit of filmy-fern physiology has been done as well.

Bryophyte Research News

Report on the tropical activities in the Research Group for Bryology of the Hungarian Academy of Sciences and at the Department of Botany, Eszterházy College, Eger, Hungary

The Research Group, due to the retirement of Prof. Tamás Pócs, has a new leader, Prof. Sándor Orbán. **Sándor Orbán**, after completing his revision of African Calymperaceae, is doing the editorial work for his monograph. He is also working on the identification of Calymperaceae and *Riccardia* material collected in 1996 from Réunion and in 1998 from Madagascar. Recently he has clarified the taxonomic position of *Syrrhopodon cuneifolius* and begun to identify Calymperaceae collected on Fiji Islands by S. & T. Pócs, in 2003.

Gabriella Kis, a senior bryologist member of the Bryology Research Group, is studying the *Daltonia* types of Helsinki herbarium and of the New York Botanical Garden. She works on the identification of Neotropical and Fiji Island Hookeriales. In addition, she is preparing a detailed, annotated catalogue of the 526 Extra-European bryophyte types (267 liverwort and 259 moss types) of Eger Herbarium (EGR).

Andrea Sass-Gyarmati, is the other bryologist member of the Eger Research Group. Her main interest is the taxonomy of Ptychanthoideae subfamily of the Lejeuneaceae. She studies the types and identifies worldwide material of the subfamily. She is also working on the revision of the African and Oceanic species of *Lopholejeunea*, and will publish new species for the group.

András Szabó, lecturer at the Botany Department, works on a worldwide revision of the genus *Leptolejeunea*, as one of the Ph.D. students of Prof. Pócs. At the moment he is also working on type studies of material from G, and identifying material collected on Madagascar and neighbouring islands.

Ricardo R. Rico, from the Universidad de los Andes, Mérida, Venezuela, is working on the revision of the Venezuelan representatives of the genus *Riccardia*, as a Ph.D. student of Prof. Pócs. At the same time as his thesis started he began to work on a monograph of the Hepaticae of Canaima National Park in Venezuelan Guayana.

A publication on the liverworts of Roraima Tepui is now available.

Tamás Pócs retired in 2003 and obtained a Professor Emeritus status. He now participates only in postgraduate training and concentrates on collecting and research work.

During the past two years Tamás, with his wife and herbarium assistant **Sarolta Pócs**, has conducted / participated in collecting trips to the Sahara Atlas of Tunisia, the Fiji Islands, the Dominican Republic and Kenya. In Kenya he held lectures and participated in the field trips of the V. and VI. Tropical African Bryology Training Courses organized by Dr. Min-Chuah Petiot at Nairobi University.

In addition, he and Sarolta have a voluntary contract with the National Museums of Kenya, East African Herbarium, to care for the cryptogamic collections for a period of three months every year. At the beginning of this year they had ordered, identified, revised and labelled the Hepaticae specimens and inventoried the types. During the same period they made a successful colleting trip to some of the drier areas of Kenya. These two Kenyan visits have resulted in the collection of several species new to the whole of Africa (this year of Didymodon revolutus and Syntrichia amphidiacea), many new to the flora of Kenya (Colura saroltae, Riccia capensis, microciliata, Mannia Nanobryum duemmeri, Weissia latiuscula, and a new variety of Pseudocrossidium replicatum) and other rarities. Finally, several taxa new to science have been discovered (recently a Cheilolejeunea and a Lejeunea species). Tamás is currently studying the epiphyllous communities and the cyanobacterial, bryophyte and lichen components of cryptobiotic crusts in arid and semi-arid areas.

He also continues his revisional work on the Australian Jubulaceae and on the Neotropical Cololejeuneae.

Future perspectives: Some members of the Eger Research Group and of the Botany Department will visit Tanzania and Madagascar in July within the framework of the Inselberg Project, to investigate the cryptogamic component of poikilohydric communities. They also plan to visit the Venezuelan Andes early next year to investigate correlations between the tropical montane forest bryophytes and their invertebrate fauna. They also expect to participate in a Comoro Islands trip with special emphasis on studying the biodiversity of Mayotte Island.

New members/Change of address

Claudine Ah-Peng: Claudine has spent nearly three years in the Bryology research team at the National Muséum of Natural History in Paris, working on the development of cultures of *Fontinalis antipyretica* Hedw. for the biomonitoring of French rivers. She would now like to focus her studies on systematics and ecology of tropical bryophytes.

Originally from Réunion Island, Claudine will begin her Ph.D. at the University of Réunion Island in October of 2004. Her thesis will be "Diversity entitled: and distribution bryophytes in Forest ecosystems of Réunion Island." Systematics, ecology and phytosociology of bryophytes will be studied. This work will consist of the comparison of bryophyte associations from primary secondary forest systems, which may have been disrupted by human activities (deforestation, culturing), natural impacts (invasive plants). The final goal will be to determine if some species of bryophytes from Réunion can indicate the state of forests for conservation.

Collaboration with bryologists from the neighbouring (Kenya, South Africa) and European countries are envisaged, to assist Claudine with the identification of specimens. She would be very interested in taking part in any tropical bryological courses.

Claudine and her co-advisor Jacques Bardat (Muséum National d'Histoire Naturelle), collected bryophytes during two weeks spent on Réunion in March 2004. Collections were made in the primary forest systems of this island (Plaine des fougères, Forêt de Mare Longue, and Forêt de la Rivière des Remparts). At present, they are also continuing their work on the identification of these specimens, and hope to prepare a paper about this first collection trip in 2005.

Presently, Claudine is responsible for the National Botanical Conservatory of Mascarin, based in Réunion Island. She has been working on a database of bryophytes from Réunion, reported in literature. This database, named "Mascarine," will hopefully be on-line on the *Tela Botanica* website at the end of 2004. The content of this database concerns names of taxa, and associated information as reported in the literature (synonymy, original publication, typification, localities etc.).

Contact details for Claudine: 119, rue Paul Hermann, 97430 Le Tampon, Ile de la Réunion, Email: ahpengc@caramail.com

Jacques Bardat: Jacques is working in the Bryology research team at the National Muséum of Natural History, Paris. His research interests concern the ecology of bryophytes, and the characterization of bryophytes communities (geographical repartition, dynamics, and their behaviour in diverse terrestrial ecosystems). He recently developed a phyto-sociological synopsis for French metropolitan bryo-associations. His skills bryological concern the European temperate area, the boreal zones (North America only) but also the tropics (French Guiana). He is particularly interested in the evolution of the bryological communities with the changes of forest ecosystems. He uses bryophytes as bioindicators to characterize the state conservation of ecosystems and to assess the impacts of transformation of natural sites. Presently, he is working with Claudine Ah-Peng to realize a reference collection of specimens for Réunion Island.

Contact details for Jacques: Muséum National d'Histoire Naturelle, Développement Régulation et Diversité Moléculaire, USM 505, 12, Rue Buffon, 75005 Paris. Email: bardat@mnhn.fr

Prof. Dr. Eberhard Fischer: is professor of botany at the University of Koblenz, Germany. He is interested in bryophytes, especially liverworts and hornworts from Central and East Africa (Congo, Rwanda, Uganda, Kenya). For more details please see his homepage (below). Eberhard Fischer is currently working on a bryophyte flora of Rwanda. He has done intensive fieldwork during 30 fieldtrips, the last ones being from September to October 2003 and March to April 2004. Beside numerous new records, a new Drepanolejeunea has been discovered (see Buchbender, V. & Fischer, E.: Drepanolejeunea vandenberghenii (Jungermanniopsida: Lejeuneaceae) a previously overlooked new species from Rwanda including comments on Drepanolejeunea physaefolia and Harpalejeunea fischeri. J. Bryol., in press.). The first volume of the Bryophyte Flora of Rwanda (Liverworts and Hornworts) is to be published in 2005/2006.

Prof. Fischer is also involved in a project on fragmentation of rainforests in Kenya and Uganda (BIOTA East), financed by the German Ministry of Education and Research (BMBF). During the first phase from 2001 to 2004, the bryophytes of rainforests with different degrees of disturbance have been studied in Kakamega Forest and on Mt. Kenya in cooperation with the Herbarium of the National Museums of Kenya (NMK) and Kenya Wildlife Service (KWS). The

second phase which started in June 2004 will extend the field work to Uganda (Budongo Forest, Mabira Forest).

Contact details for Prof Fischer: Institute of Integrated Natural Sciences, Department of Biology, University of Koblenz, Universitätsstr. 1, D-56070 Koblenz e-mail: efischer@unikoblenz.de. Website: http://www.unikoblenz.de/~sinsch/html/fischer/start.html

Aino Juslén: Hi, I am Aino Juslén, a PhD student from University of Helsinki, Finland. Currently I live in the Netherlands, and work as a visiting researcher in University of Utrecht. You will find me in Helsinki again in December 2004. I study a magnificent genus of liverworts, Herbertus. I concentrate on Asian species and I am interested also in phylogeny of the genus. I belong to group of hepaticologists in Helsinki, together we examine phylogeny of liverworts. I have also studied the Singapore liverwort flora and taken part to the project Bryophyte flora of Hunan Province, China. A new most challenging project led by Benito Tan and Sinikka Piippo is the bryophyte study of two nature reserves in Sri Lanka. I will enjoy collecting there next January.

TBG Notice-board

Index Hepaticarum: Work on the completion of the final volume (A-Jubula) of the second editions of Index Hepaticarum continues at Conservatoire et Jardin botaniques de la Ville de Genève (G). The project database now contains 30,370 hepatic names (9519 for the series A-Jubula). Michelle Price and Anne Streiff are currently working on verifying database entries, specifically adding the few missing names and/or protologue and publication information, and verifying the nomenclature and validity status for each record. Soon the assistance of expert / specialist hepaticologists will be needed to check over database records as genera are completed.

International Association of Bryologists (IAB) meetings: The next IAB meeting will be held at the International Botanical Congress in Vienna to be held in July of 2005. The following IAB congress will be held in 2007 in Kuala Lumpur, Malaysia. Visit the new IAB website at: http://www.bryology.org

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Tropical Bryology

Vol. 24 of Tropical Bryology was published in 2004. To subscribe to this journal contact Jan-Peter Frahm (frahm@uni-bonn.de). Each volume is charged separately at around £10 per volume. There is also a webpage for the journal: http://www.uni-bonn.de/bryologie/tb.htm

Collecting mosses in Sri Lanka

From 16 to 30 May this year I was in Sri Lanka, collecting bryophytes with Dr Benito C. Tan, on a trip organised by Dr Nimal Gunatilleke of Peradeniya University, Sri Lanka, to Sinharaja forest and the Knuckles mountains. This trip was funded by Peradeniya University, Peradeniya Botanic Garden, the National Geographic Society and the National University of Singapore. A couple of years ago I published a checklist of the mosses of Sri Lanka (1), having never been to the island, so it was a great pleasure at last to set foot there, and to see some of the mosses which previously were just names to me. The checklist (1) included 558 mosses - a very high total for a land mass that is only 27% of the size of the UK. Bryology has a long and illustrious history in Sri Lanka, particularly in the 19th Century, mainly due to the efforts of Gardner and Thwaites, two of the early Directors of Peradeniya Botanic Garden, between 1844 and 1880. collections were distributed widely by William Mitten, who identified most of them and published many endemic species, and duplicates of which are still present in Peradeniya Herbarium (PDA).

In an analysis (2) of the data gathered for the checklist the main influences on the diversity of Sri Lankan mosses were seen to be the lack of a significant dry season, and migration of rainforest species from S. E Asia (presumably via the prevailing winds). This high level of diversity, and moss endemism of 11% (1.5% endemism in the UK), is despite a density of population higher than that of the UK.

More details and statistics, and an up to date checklist with synonyms and literature details, can be found at:

http://www.tropicalbryologyresearch.co.uk/ (click directly onto the 'Sri Lanka' button). This link will also take you to an account of our trip, with a number of photos showing the landscapes and habitats we visited.

Bryology is taught at Peradeniya University as part of the botany course. This botany course includes a strong fieldwork element and knowledge of local flora and fauna was high, particularly amongst those doing Master's degrees; conservation-related projects were popular. Equipment suitable for bryology is in short supply, but this hasn't stopped students building up a small collection in the department, however there is no published flora of Sri Lankan bryophytes so identification is difficult. Peradeniya Botanic Garden is next to the university campus, and has an elegant herbarium, which has been much used during the current production the new flowering plant flora, but little use is made of the bryophyte herbarium. The herbarium is not air-conditioned, but the specimens, housed in hardwood cupboards, are easily accessible and in reasonable condition (glued to sheets). Some more modern collections are held separately, and are kept as individual packets in card-index style. Loans are available. The Director of the Garden, Dr. Wijesundara, is responsible for the herbarium as well as the entire (very large) garden, research, and the molecular facility which is used also by university students.

The specimens collected by Ben Tan and myself will be posted to Ben in Singapore when all the paper work is completed. collections will be sent to me for packeting, and we then divide the specimens for identification, each of us responsible for specific families. The end product will be a joint paper, covering both bryology and the wider areas of ecology, habitats, forest types and conservation priorities. Brian J. O'Shea

- (1) O'Shea, B.J. 2002. Checklist of the mosses of Sri Lanka. J. Hatt. Bot. Lab. 92: 125-164.
- (2) O'Shea, B.J. 2003. Bryogeographical relationships of the mosses of Sri Lanka. J. Hatt. Bot. Lab. 93: 293-304.

Bryological Research at Göttingen: ongoing

projects in tropical bryology, 2004

Dept. of Systematic Botany, University of Göttingen (head: Prof. S. R. Gradstein)

Research activities in Göttingen are focused on systematics (1), mainly of tropical hepatic families and genera, and ecological and floristic studies (2). Below a summary of the current research projects and students in this research team is presented.

1. Systematics

Lejeuneaceae

- Revision of the genus Lejeunea for FLORA NEOTROPICA, Elena Reiner-Drehwald.
- World monograph of the genus Prionolejeunea. Anna Luiza Ilkiu-Borges, Ph.D. thesis.
- Molecular phylogeny of the genera of Lejeuneaceae, Rosemary Wilson, Ph.D. thesis.
- Molecular phylogeny of the genus Bryopteris. Florian Hartmann, M.Sc. thesis.

Plagiochilaceae (Jochen Heinrichs and students)

- Molecular phylogeny of Plagiochilaceae at world level. Henk Groth, Ph.D. thesis; Melanie Lindner, M.Sc. thesis.
- Revision of Plagiochilaceae for FLORA NEOTROPICA, Jochen Heinrichs.

Herbertaceae

- Molecular phylogeny of the genus Herbertus in tropical America, Katrin Feldberg, M.Sc. thesis.

Acrobolbaceae

- Revision of the genus Tylimanthus in the Tropics, Michael Burghardt, M.Sc. thesis.

Frullaniaceae

- World monograph of Frullania subgen. Meteoriopsis, Jaime Uribe, Ph.D. thesis.

2. Ecology and floristics

Ecuador

- Human impact on the diversity of cryptogamic epiphytes in montane forests of southern Ecuador, Nicole Nöske, Ph.D. thesis.
- Cryptogamic diversity of upper montane forests of southern Ecuador in relation to climate and soil, Nicole Mandl, Ph.D. thesis.
- Catalogue of the Liverworts and Hornworts of Ecuador. Rob Gradstein together with Suzanne León-Yanez (Quito) and Caroline Wegner (Göttingen).

Indonesia: Sulawesi

- Diversity of cryptogamic epiphytes as a function of land use intensity in Central Sulawesi. Simone Sporn and Nunik, PhD thesis.

- Catalogue of the Bryophytes of Sulawesi. **Rob** Gradstein together with Ben Tan (Singapore) and students.

French Guiana

- Guide to the Plants of Central French Guiana. Part 4: Liverworts and Hornworts. Rob Gradstein (text) and Anna Luiza Ilkiu Borges (illustrations). This project will start in the autumn of 2004.

For a listing of our publications in tropical bryology and other titles please consult our homepage: www.gwdg.de/~sysbot

Books

Mosses and Liverworts of Kenya, Min S. Chuah-Petiot. Published in Nov. 2003.

In this publication 359 species of bryophyte from Kenya are treated, each with a line drawing. The book is 17.3 x 25.6 cm in size and consists of 273 pages. It can be ordered from these two sources: 1) Librairie René Thomas, 28 rue des Fossés Saint-Bernard – 75005, Paris, France. Email: librairie.thomas@wanadoo.fr (credit card payments accepted); 2) koeltz@t-online.de (VISA, American Express, Master/Eurocard payments accepted).

If anyone is aware of, or has published / reviewed other books of interest to TBG members, please send the details, book titles or your reviews to the TBG coordinator (address below).

Coordinator: Michelle J. Price,

Conservatoire et Jardin botaniques de la Ville de Genève, Case Postale 60, CH-1292 Chambésy-GE, Switzerland.

Tel: 022 418 5148 (International +41 22 418 5148) email: Michelle.Price@cjb.ville-ge.ch

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TBG 67 / news19 - August 16.2004

BRITISH BRYOLOGICAL SOCIETY

TROPICAL BRYOLOGY GROUP NEWSLETTER

Edited by Michelle J. Price

No. 20 September 2005

Annual General Meeting

The next TBG AGM will be at the *BBS AGM* and *Bryological Symposium* to be held at the University of Wales, Bangor, 9-11 September 2005. The TBG AGM meeting itself will be held on 10th September, place and time to be arranged.

TBG AGM AGENDA

- 1. Notes of last AGM
 - 2. Matters arising
- 3. TBG expeditions
- 4. New TBG objectives
- 5. Any other business
- 6. Place & date of next TBG AGM

BBS TBG AGM

9th October 2004 Preston Montford **Notes of Meeting**

Present: Tom Blockeel, Jonathan Graham, Nick Hodgetts, Liz Kungu (minutes), Ron Porley, Michelle Price (chair), Jonathan Sleath, Robin Stevenson. **Apologies**: Jeff Duckett, David Long, Angie Newton, Brian O'Shea, Malcolm Watling.

Notes of the last AGM (Newsletter 19). Accepted.

1. Matters arising

AP1 & 2. Brian O'Shea was to contact Dr Seyani and Michelle Price to contact Zach Magombo regarding a future Malawi trip, no further information was available concerning this proposal.

Library: Brain O'Shea was to contact Ken Adams about the tropical coverage in the BBS library. There was some discussion about the need for a catalogue of the tropical literature and the possibility of obtaining grant funding. This AP is suspended until it is ascertained whether the whole library will be catalogued at Cardiff.

The possibility of retaining duplicates of the tropical literature was discussed.

2) Future directions of the TBG

Discussion centred around the role of the TBG in future expeditions, wherever the location. The objectives suggested where:

- Provision of a local check-list
- Provision of reference collections for local herbaria
- Training workshops for local staff in both herbarium and identification skills
- Provision of literature relevant to the local flora
- Production of field guides for limited habitats such as in the vicinity of major towns, local areas and reserves as well as the more remote localities.

The need for focused collection efforts was emphasized and it was suggested that a series of expeditions over three years to a single country could best meet these needs. Contact with local teachers as well as Universities could be useful to stimulate local interest. Target groups for the workshops could include those already working in relevant areas such as wildlife conservation, forestry and reserve management as well as teachers and University students.

Localities discussed

- Return to Malawi: favoured because of existing contacts in the country, a viable base from which to start, the opportunity to build on the previous work and the existence of a nucleus of an herbarium and a bryologist in the country.
- Northern Madagascar: an approach had been made through Geneva concerning the survey of dry and humid forest in the north of the island. There was considerable enthusiasm for this proposal among the group, with the possibility for helping local students, providing a series of site checklists and a reference herbarium and running workshops in basic bryology as well as

identification skills. A field station and vehicles are available locally and there is a provisional list of taxa compiled by Tamás Pócs and Patricia Geissler. It was hoped that a Madagascan student could come to study in the UK, possibly at the BM or Edinburgh, using a *Synthesys* grant. The need for a preliminary visit by one of the TBG to prepare for future expeditions was discussed and Ron Porley expressed an interest in this possibility.

- South Africa: No further information had been received from Terry Hedderson about an expedition to SA.
- Belize: Angie Newton had suggested that there might be an opportunity to use the field station in Belize as a base for bryological studies. Some preliminary fieldwork has been done by RBGE M.Sc. students.

Further discussion centred round the use of bryophytes in teaching efforts abroad, there use in physiological experiments and whether the TBG could prepare teaching materials using bryophytes. The need for emphasis of the ecological and environmental role of bryophytes was raised, and for bryologists to be part of a multidisciplinary team including vascular plant botanists, lichenologists, mycologists and ecologists.

Action Point 1. Michelle Price to contact Zach Magombo about future Malawi visits and Zomba Herbarium involvement in a possible expedition late in 2006/7/8.

Action Point 2. Liz Kungu to make enquiries at the RBGE about the current guidelines for submission of Darwin Initiative funding applications and whether David Long could front such an application, which would be coordinated by Michelle Price.

Action Point 3. Michelle Price to explore the opportunity to contribute to the Madagascar project and possible sources of funding.

Action Point 4. Michelle Price to rethink the TBG objectives.

3) Any other business

Michelle Price received an e-mail from Malcolm Watling about the illustrations for the Flora of Uganda. Malcom was very pleased to be involved with this project.

Jonathan Graham volunteered to help with drawings if needed.

Brian O'Shea has redesigned the TBG web page; Michelle Price will now revise the content of the web page.

Queries regarding the *Guide to bryophytes of sub-Saharan Africa* (GBA) should be directed to Brian O'Shea or Martin Wigginton. For contact details / GBA information see:

http://www.gbaonline.org.uk/

Contributions to TBG newsletters

The TBG newsletter relies on contributions from members, especially for the section 'news of members,' and for information on bryological research activities, information on publications and for any features included.

Please send your contributions for future TBG newsletters, at any time, to Michelle Price at Michelle.Price@cjb.ville-ge.ch.

Report: XVII International Botanical Congress (IBC), Vienna, Austria.

The IBC was held at the Austria Center in Vienna, Austria from 17-23 July 2005. The congress was very well attended and over 4000 participants enjoyed a diverse number of symposia during the 5 and a half day congress period. Bryological representation at the IBC was good with bryologists from Africa, Asia, Europe, Central, South and North America, and Oceania present in Vienna. Four brylogical symposia were presented during the course of the conference and a large number of bryological posters were on display (see listing below for the bryological papers and posters presented at the IBC-Vienna).

The International Association of Bryologists (IAB) held a dinner on Thursday evening where Dr. Janice Glime took over the presidency of the IAB from Prof. S. Robb. Gradstein. The IAB council now consists of Janice Glime (President), Claudio Delgadillo (Vice President), Benito Tan (Vice President), Geert Raeymaekers (Secretary), Blanka Shaw (Treasurer), with Uwe Drewhald responsible for the IAB website. During the dinner several prizes were given out. The Hedwig Prize for life-time achievement in Bryology was awarded to Dr. Lewis Anderson of Duke University in North Carolina, U.S.A. while the Hattori Prize was awarded to Dr. A.J. Shaw, also from Duke University, for his series of papers over the last two years.

The new IAB web site is now available at: http://www.bryology.org/index.html

Bryological paper presentations

- Acclimation to within-canopy water and carbon dynamics M. Tobias.
- A comprehensive molecular phylogeny of liverworts (Marchantiophyta) L.L. Forrest, E.C. Davis, D.G. Long, B.J. Crandall-Stotler, R. Wilson, J. Heinrichs, A. Clark, M.L. Hollingsworth.
- Actin dynamics in *Physcomitrella patens*: role in polar tip growth R.S. Quatrano, M. Bezanilla, P. Perroud, P. Harries, A. Pan, P. Klueh, J. Cho, D. Cove.
- An integrated model of bryophyte canopy water and carbon dynamics S.K. Rice
- Biomonitoring of disturbance in neotropical rainforests using bryophytes as indicators U. Drehwald.
- Bryophyte floras in the digital age: floras for those who cannot afford them B.J. O'Shea.
- Bryophyte phylogeny: pushing the molecular and morphological frontiers forward K.S. Renzaglia, J. Shaw.
- Bryophytes and the iceman J.H. Dickson, W. Holfbauer.
- Complexes of characters provide important insights into the function and evolution of pleurocarpous mosses L. Hedenäs.
- Desiccation tolerance in Bryophytes: the primitive strategy for land plants A.J. Wood, M.J. Oliver, B.D. Mishler.
- Desiccation tolerance of epiphytic bryophytes in relation to microclimate in a Venezuelan cloud forest Y. Léon, M.C.F. Proctor, S. Engwald.
- Desiccation tolerance in the liverwort *Jamesoniella colorata* C. A.M. Hooijmaijers
- Dispersal and establishment of ground layer mosses and lichens : dynamics at a local scale D.H. Vitt.
- Effects of an altitude-dependent natural gradient of UV-B radiation on the physiology of sun and shade populations of an aquatic liverwort M. Arróniz-Crespo
- How does life history attributes shape local scale genetic structure ? U. Gunnarsson.
- Influence of forest modification on epiphytic bryophyte diversity in the tropics S. R. Gradstein.
- Infra-specific molecular phylogeny of bryophytes T. Hedderson, J. Shaw.
- Inversions and length mutations in chloroplast DNA and their phylogenetic utility D. Quandt, M. Stech, K. Müller, C. Löhne, K.W. Hilu, T. Borsch.
- Local scale genetic structure of bryophytes B. Shaw.

- Matrix population models an unused tool among bryologists K. Ryden.
- Metadata and classification and regression trees on accumulation of metals in mosses W. Schröder, R. Pesch.
- Mosses an alternative adaptation to life on land M.C. F. Proctor.
- Plastid transformation in the moss *Physcomitrella* patens M. Sugita, C. Sigiura, Y. Miyata.
- Parameters affecting the frequency of homologous recombination in *Physcomitrella* patens D.J. Cove, Y. Kamisugi, A.C. Cuming.
- Progress and challenges in reconstructing Hornwort phylogeny R.J. Duff, K.S. Renzaglia.
- Phage-type RNA polymerases in *Physcomitrella* U. Richter, E. Decker, A. Weihe, R. Reski, T. Börner
- Phylogenetic significance and diversification of the Bryophyta *sensu lato* B. Goffinet, J. Shaw.
- *Physcomitrella*: at the intersection of bryology and pathology M.A. Lawton, H. Saidasan.
- *Physcomitrella patens* as a novel tool in plant functional genomics R. Reski.
- Physcomitrella patens as a powerful model organism for EvoDevo studies: functional analysis of moss homologs of the floral regulator FLO/FLY T. Tanahashi, N. Sumikawa, M. Kato, M. Hasabe.
- Seasonal variations in storage substances and sensitivity to predators in the moss *Grimmia* pulvinata B. Estébenez Pérez.
- Sexual reproduction in unisexual bryophytes novel insights and implications I. Bisang.
- Stress- and ABA- responses in *Physcomitrella* patens: a transcriptomic approach A.C. Cuming, Y. Kamisugi, R.S. Quatrano.
- The genomics of desiccation tolerance in Bryophytes M.J. Oliver, P.R. Payton.
- The Moss Diversity Project: Haplolepideae (Dicranidae) C.J. Cox, B. Goffinet, J. Shaw.
- The role of sexual and asexual reproduction for local dynamics and rarity L. Söderström.
- Variation in the use and knowledge of the medicinal moss HuiXinCao E.S.J. Harris.

Bryological posters

- A molecular phylogeny of the genus *Leucobryum* (Leucobryaceae, Musci) in Asia and the Pacific E. Orguri, H. Tsubota, T. Yamaguchi, H. Deguchi.
- Anatomical and ultrastructural innovations in *Leiosporoceros dussii* (Steph.) Hässel. J.C. Villarreal.
- A new species of *Exormotheca* (Exomorthecaceae, Hepaticae) from China M. Higuchi, T. Furuki

- Application of chlorophyll fluorescence to detect the PC role in metal tolerance in bryophytes – D.K. Saxena, Z. Tuba, J.M. Glime.
- A revision of the genus *Dimerodontium* (Bryophyta) with considerations about familiar position using cpDNA P.S. Camara, R.E. Magill.
- A revision of the Colombian species of *Polytrichadelphus* A. Aponte, E. Linares.
- A revision of the genus *Thamnobryum* (Musci) of Japan T. Kagenishi
- A taxonomic revision of *Herbertus* (Jungermanniopsida: Herbertaceae) in tropical America based on nuclear and chloroplast markers and morphology K. Feldberg, R. Wilson, J. Heinrichs.
- A taxonomic study of the genus *Syntrichia* Brid. (Pottiaceae) in Europe M.T. Gallego, M.J. Cano, J. Guerra.
- *'Bartramia stricta'* Brid. (Bartramiaceae in the Mosel Valley a relict from the postglacial temperature optimum D. Quandt, S. Lenz, M.T. Pham, K. Salomo, J. Schäfer, L. Symmanj, J.-P. Frahm.
- Biomonitoring of road traffic emissions by mosses H.G. Zechmeister, D. Hohenwallner, A. Hans-Illnar, S. Scharf, A. Riss.
- Brotherus' and Fleischers' view of the Lembophyllaceae – V. Buchbender, S. Olsson, R. Tangey, S. Huttunen, D. Quandt.
- Bryophyte conservation in Romania. History and perspectives I. Goia.
- Bryophytes on cliffs and talus slopes of southwestern Moravia (Czech Republic) S. Kubešová
- Correlations and differences between local and general ranges of vascular plants and mosses M. Zajac, A. Zajac.
- Diversity and composition of dead-wood inhabiting fungal and bryophyte assemblages in semi-natural beech forests in Europe P. Ódor, J. Heilmann-Clausen, M. Christensen, E. Aude, K.W: van Dort, A. Piltaver, I. Siller, M.T. Veerkamp, R. Walleyn.
- From laboratory to field: the use of material from *ex situ* collections in the introduction of a rare moss J. K. Rowntree.
- Functional analysis of class 2 KNOX gene in *Physcomitriella patens* K. Sakakibara, H. Deguchi.
- Highly frequent RNA editing in rbcL gene of Takakiophyta T. Arikawa, M. Higuchi.
- Identification of Metallothionein as a Heavy Metal Tolerance mechanism in *Sphagnum magellanicum* S. Hicks.
- $\begin{array}{l} Index\ Hepaticarum: final\ publication\ and\ a\ new\\ on-line\ database-M.J.\ Price,\ A.\ Streiff. \end{array}$

- In vitro and ex situ culture of hepatics an innovative approach for an inventory A. Cailliau, M.J. Price.
- Katalalixar: Liverworts Paradise J.A.V. Cuvertino Santoni
- Recolonisation potential of bryophyte fragments in hydrologically restored rich fens K. Mälson.
- MADS about moss N.W. Ashton, S.D. Singer, N.T. Krogan.
- Mitochondrial DNA of early land plants: introns, exons and spacer evolution in bryophytes M. Groth-Malonek, T. Rein, V. Koop.
- Molecular cytological comparative analysis of *Pellia* species M. Orzechowskam, J Maluszynska, D. Siwinska.
- Molecular systematic study of *Conocephalum* (Hepaticae). M. Hiwa, I.J. Odrzykoski, H. Akiyama, R. Sabirov, H. Takahashi, N. Murakami.
- Molecular variation in *Isothecium alopercuroides* (Lam. ex Dubois) Isov. including a deviating form from Morocco I. Draper, F. Lara, V. Mazimpaka, L. Hedenäs.
- Moss flora of Greater Belgrade S. Grdovic
- Origin and subdivision of *Plagiochila* (Jungermanniopsida: Plagiochilaceae) in tropical Africa J. Heinrichs.
- Oxidative stress induced by trivalent and hexavalent chromium species in *Fontinalis antipyretica* Hedw. M. Dazy, E. Béraud, S. Cotelle, P. Akinomi, L. Guiamberini, J. Férard, J. Masfaraud.
- Photosynthetic features of desiccation tolerant moss species native of C02 spring A. Juhász, M. Kaligaric, Z. Csintalan, M.C.F. Proctor, Z. Tuba.
- Phylogeny of *Dicranoloma* (Bryophyta, Dicranaceae) based on ITS and morphology N. Klazenga
- Phylogeny or Lejeuneaceae (Jungermanniopsida) based on the cp rbcL, trnL-F and nrITS R. Wilson, R. Gradstein, J. Heinrichs, A. Iliku Borges, F.A. Hartmann.
- Phylogeny of *Grimmia* Hedw. (Grimmiaceae, Bryopsida): reproductive strategies influence recombination rates A. Streiff, M.J. Price, N. Galland.
- Plant homologs of bacterial peptidoglycan biosynthesis genes in moss H. Takano, M. Machida, S. Takio, K. Takechi, H. Hasabe.
- Rare and threatened liverworts: An overlooked area of conservation in the New Zealand botanical region M.J. von Konrat, J.E. Braggins, M. Renner, J.J. Engel, P de Lange.
- Reconstructing the evolution in the Metzgeriales Schljakov subord. Pallaviciniineae R.M.

Schust., the "Vascularized" liverworts – B.J. Crandall-Stotler, L.L. Forrest, R. Stotler.

Relationship between metal concentration in moss tissues and deposition fluxes: example of a French remote area – S. Leblond, C. Rausch de Traubenberg.

Repetitive DNA behaviour inducted by metals in *L. riparium* and *F. hygrometrica* gametophytes – P. Bassi, A. Basile, M. Ferraro, E. Napolitano. Role of the PpPOK protein, an homolog of the yeast Vps52p protein involved in vesicle

yeast Vps52p protein involved in vesicle trafficking, in the protonema growth of *Physcomitrella patens* – H. Guermoprez, F. Charlot, A. Guyon, F. Nogué, S. Bonhomme.

Some anatomical and ultra-structural peculiarities in epigeoid, epilit, epixyl and epiphyt mosses from Ara mountain (Armenia) – A.V. Poghosyan, G.H. Oganezova.

Spore ultrastructure in five Canarian species of pleurocarpous mosses – C. Alfayete, B. Estébanez, E. Ron.

Susceptibility of Antarctic mosses to UV-B induced DNA damage – J.D. Turnbull, S.J. Leslie, J. Wasley, S.A. Robinson

Systematics and distribution of the Mexican *Grimmias* (Bryopsida) – C. Delgadillo-Moya, J. Villaseñor-Rios.

Taxonomic and phylogenetic positions of the genera *Brotherella*, *Pylaisiadelpha* and *Wijkia* (Sematophyllaceae) – H. Tsubota, P.J. Dalton, R.D. Seppelt, H. Deguchi.

Taxonomic studies on the genus *Cololejeunea* (Hepaticae, Lejeuneaceae) in Asia – Revision of Cololejeunea in China – R. Zhu.

Testing water-mosses for their indicative value at three Austrian rivers (Traisenm Große Tulln and Perschling) – K. Poller, H.G. Zechmeister.

The bryophyte flora of Geneva past and present : an analysis of bryophyte distribution in Geneva using GIS – L. Burgisser, M.J. Price.

The complex Thalloids – evolving simply – D.G. Long, L.L. Forrest, M.L. Hollingsworth, A. Clark, D.B. Schill.

The cryptogamic flora of the Zgurasti Cave and surroundings (Apuseni Mountians, Romania) – A. Sass-Gyarmati, K. Molnár, S. Orban, T. Pócs.

The family Metzgeriaceae (Hepaticae) in the Tropical America – D.P. Costa.

The occurrence of tubers in *Noteroclada* confluens Taylor ex Hook. &Wilson – L. Zhang, B.J. Crandall-Stotler, R. Stotler.

The phytochemistry of *Riccia nigerica* Jones – O.A. Ariyo.

The use of bryophytes as monitors of freshwater ecosystems – C. Vieira, C. Sérgio, A. Séneca.

Understanding a rare species. The case of *Orthotrichum rogeri* Brid. in the Pyrenees – L. Pokorny, R. Garilleti, F. Lara, V. Mazimpaka. What makes leafy gametophytes turning – M. Turzanska, B. Zagórska-Marek. *Michelle Price*

Bryophyte Research News Bryological activities at Royal Botanic Garden, Edinburgh 2004-05

Dr. David Long

The past year has been an active one at Edinburgh. Curatorial work by Sally Rae has focussed on continued incorporation of the A.C. Crundwell and C.C. Townsend bryophyte herbaria, as well as the bryophyte type catalogue which, though incomplete, is now accessible online. Distribution of duplicates included recent Chinese collections of David Long (DL). Venezuelan mosses collected by DL in 2004 were sent to Howard Matcham for identification. Liz Kungu (post-doctoral researcher) concluded her work on sampling Scottish bryophytes for a pharmaceutical screening project on native plants based at Strathclyde University. Liz and David Chamberlain are co-ordinating recording work in Scotland for the new BBS Bryophyte Atlas project, concentrating on areas neglected in the past.

Research on Marchantiales continued with Daniela Schill's monographic work on Mannia, including an SEM spore survey, molecular sequencing and morphological studies. programme of field work continued with travel to India and Peru to try to re-find so-called 'local endemics' in the genus. Many interesting Marchantiales were collected, including the genus Cryptomitrium new to Peru. Work on Asterella progressed with completion of the manuscript for the revision of the genus in Sequencing of Marchantiales was undertaken at RBGE as part of the collaborative liverwort phylogeny project with Southern Illinois and Duke Universities, for presentation at the IBC in Vienna in July 2005.

Work on *Anastrophyllum* continued with a morphological and molecular study on *A. alpinum* and *A. joergensenii*, now considered both to be separate species disjunct between Europe and Asia. Jane Squirrell completed her study of disjunction in *A. alpinum* using microsatellite markers. Alain Vanderpoorten (Liege) visited for 2 months in April/ May 2005 to collaborate with David Long on endemism in

Macaronesian bryophytes, using phylogeny of *Leptoscyphus azoricus* as a pilot study.

Floristic work in the Sino-Himalaya included a 6-week visit to Yunnan by David Long in October/ November 2004 to collect bryophytes in the Dulong Jiang valley in the Irrawadi catchment, as part of the ongoing NSF-funded 'Biotic Survey of Gaoligong Shan, Yunnan'. This expedition was highly successful, with a number of rare species new to Yunnan including *Takakia lepidozioides*, and the discovery of a new species of *Lobatiriccardia*, a genus new to China.

GBA online: www.GBAonline.org.uk

As most of you will now know, GBA (Guide to bryophytes of sub-Saharan Africa) has now gone online. Forty moss families are now available (i.e. 38 of the 78 moss families still awaited), although a lot of the 40 are still awaiting illustrations. The remaining families and illustrations will be added as they become The key to families is not yet complete, and any comments on the existing key would be welcome. Keys to species are not within the scope of GBA, but where species keys covering sub-Saharan Africa are available, we will be asking permission to link to these from GBA online.

The response so far has been very encouraging, the general view being that this is the way forward, whether or not we are able to achieve completion and a published volume. The message from MBG, who have agreed to publish the book, is that the online version is likely to stimulate interest in the book and to increase rather than decrease sales. Seminars at the recent International Botanical Congress in Vienna indicated that this is now the preferred route for floras - build them up on-line before publication.

Considering the shortage of illustrations, anyone able to help with this should get in touch with me - we would hope to be able to provide African specimens for the drawings. Authors will be acknowledged on the plates.

The website is at: www.GBAonline.org.uk Brian O'Shea (brian@brianoshea.co.uk)

An Ethno-Bryological Challenge?

In a book about Ethiopia, called 'A Far Country' by Philip Marsden-Smedley (1990), I came across a passage which riveted me. In

describing a pilgrimage to the summit of the holy Mount Zikwala, which lies just south of Addis Ababa, he describes a scene beside the crater lake where 'Others stopped to draw holy water, handing tins to boys who waded through the reeds, or shinnied up a tree to collect **holy moss** from its boughs.'

I asked friends who are currently doing VSO in the country to investigate this, to see if they could find out anything more about the holy moss. Unfortunately they were unable to come up with any more information. Although I have been out to visit them, I was – alas - unable to arrange a visit to Mt Zikwala, so the names and nature of these sanctified bryophytes remain unknown.

As I am unlikely to visit Ethiopia again, I offer this golden opportunity to gain Bryological Glory to any colleagues who may. It would be fascinating to know the identity of the species involved, and to find out *why* they are regarded as holy. It is certainly a topic which deserves further airing: the use of *Sphagnum* as nappyliner is one thing, moss functioning in a line of communication from the Almighty is quite another. *Robin Stevenson*.

Bryology in the Centro Jardìn Botánico, Mérida, Venezuela.

More than a year after organizing the XV world congress of the IAB in Mérida we bring you up to date with what has happened in bryology here in Centro Jardìn Botánico, Mérida.

Yelitza León and Maria Silvina Ussher published a paper on the educational campaign to prevent bryophyte extraction in the Andes in the proceedings of the congress: *Journal of the Hattori Botanical Laboratory*, N° 97.

Yelitza León has also published a list of mosses new to Mérida and Venezuela in *Plantula*.

Yelitza León together with Dr. Michael Proctor and Dr. Stefan Engwald will publish an article on "Microclimate, light adaptation and desiccation tolerance of epiphytic bryophytes in Venezuelan cloud forests" in an upcoming issue of *Journal of Biogeography*.

With the money that was left over after the organisation of the congress Luz Rivera was hired to arrange and database our small collection of bryophytes. We are very proud that our collection is now fully databased and that we have reached 5000 bryophyte collections in our herbarium (MERC). We thank all the collectors who have enriched our herbarium and especially Drs. Steve Churchill, Bruce Allen, Robert

Gradstein, Jan-Peter Frahm, Elena Reiner-Drehwald, and Tamas Pócs for identifying the specimens that we sent them as gifts.

Tamas Pócs and S. Robbert Gradstein have also helped us to build up our library collection.

Lic. Maria Silvina Ussher and Dr. Yelitza León are working on the new checklist of Venezuelan mosses which should be ready in 2006. In addition we have recently started a project on high Andean mosses with a new Master student, Maria Fernanda Potentini. She will work on the mosses of the High Andean peatlands at around 4000 m.

Ricardo Rico, who works on hepatics at the Centro Jardìn Botánico, will finish his thesis next year. He is currently working on the genus Ricarrdia in Hungary with Dr. Tamàs Pócs. This year Ricardo Rico has published a checklist of Roraima liverworts from (Cryptogamie, Bryologie) with Dr. T. Pócs, and an article on the family Aneuraceae in Venezuela. Ricardo Rico has also recently carried out collecting trips in the states of Monagas and Sucre, and in collaboration with the bryology group in Hungary (T. Pócs, G. Kiss, S. Orban and K. Molnar - lichens) collections have been made in the states of Mérida, Trujillo, Lara, Falcon and Aragua. All these collections will be added to the bryophyte herbarium of MERC.

Yelitza León and Ricardo Rico

Bryoflora of Réunion Island (France)

Since the beginning of my Ph.D. last November, I have been collecting and identifying specimens sampled in many places in Réunion. Presently the number of my collections is around 500 samples of which only 1/6 are determined.

The identification of species notably from *Lejeuneaceae*, the *Aneuraceae* (*Riccardia* sp.), the *Herbertaceae*, *Orthotrichaceae* (*Schlotheimia* sp.) are not easy, so I would be very glad if anybody that can send me (PDF or post) some references on these families.

I will concentrate my Ph.D. research on the study of the primary succession of bryophytes on lava flows of the Piton de la Fournaise Volcano that are between 1 year to 5 centuries old (lowland tropical forest of Mare-Longue). This forest is a remnant insular lowland forest in the eastern part of the island. During June 2005, 791 samples were collected for this study and the coming months will be dedicated to the identification of these specimens, and the analysis of the results obtained. A second research theme will deal with the impact of the

altitudinal gradient on bryophytes in the same geographical area, this study will be realised in collaboration with Dr. Min Chuah Petiot in November of 2005.

During a 2 day stay at the National Botanical Garden of Belgium in April 2005, Jacques Bardat and I found around 40 species of *Hepaticae* in the herbarium in Meise that were new for Réunion Island. A short publication is in preparation, this article will list the new species found, in collaboration with H. Stiperaere (curator of the herbarium).

Recent publications:

- Ah-Peng C. & Bardat J., 2005. Checklist of the bryophytes of Réunion island (France), Tropical Bryology 26:89-118
- Ah-Peng C., Bardat J. & Ellis L., 2005. Additions to the bryoflora of Réunion island, Lindbergia *in press*.

Claudine Ah-Peng

Contact details:

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Email: claudine.ahpeng@univ-reunion.fr

Venezuela collections and additions to the checklist

A number of TBG members visited the IAB (International Association of Bryologists) meeting in Mérida, Venezuela in January 2004, and took part in field trips arranged as part of the conference, and also trips made on a few days after the meeting. We are now attempting to put together a list of all taxa seen (which included a good number of species new to the country) for publication. If you made any collections and haven't yet sent the identifications to Yelitza León, could you please send them to me, and with the help of Howard Matcham (who identified the majority of collections made by UK attendees), I will pull together a list of everything This will also include all those already sent to Yelitza.

Yelitza and colleagues have put together a checklist for Venezuela and any new findings will be collated as additions to this checklist. Brian O'Shea (brian@brianoshea.co.uk)

New members/Change of address

Boon-Chuan Ho - As my final year project during my undergraduate studies I chose to do a

study of the ecology of mosses, due to my interest in botany. Since then I have developed a strong interest in bryophytes and have been spending much time collecting and identifying mosses. As a result I have found several new distributional records and two new species of mosses for Singapore. Contributing to the inventory of the biodiversity in bryophytes, especially mosses in Southeast Asia where much has yet to be unveiled, has since become my main research interest.

I went to study for a M.Sc. degree in plant taxonomy at the National Herbarium of Leiden University, The Netherlands. In Leiden, I was given a research project to work on the taxonomy of the Malesian *Calyptrochaeta* (=*Eriopus*) under the supervision of Dr. Hans Kruijer and Dr. Dries Touw.

I have learned a lot during my study for my M.Sc. at Leiden University, not only about mosses, but also in general botany and especially the methods of taxonomy. I have now returned to Singapore and decided to further pursue my interest in Malesian bryophytes.

I am currently working part-time at the National University of Singapore while applying for a study scholarship for my Ph.D. degree in Europe.

Jo Wilbram - I now am currently working in the herbarium at Kew Gardens on an herbarium type specimen digitalisation project for African type specimens (Andrew W. Mellon Foundation – African Plants Initiative).

I have finished my paper on the Himalayan Zygodon with David Long and it should be published in the Journal of Bryology later this year. The tropical Zygodon's seem in great need of revising (I had a quick look through the literature for the African species). It seems like a big job but I would like to have a look through the collection at BM if I get a chance whilst in London.

My first brush with tropical bryology was last year when I went to Belize on a field trip with my MSc course (Biodiversity & Taxonomy of Plants through Royal Botanic Garden of Edinburgh). I made a small bryophyte collection (housed at RBGE) which I have attempted to identify (with varying success...). A bit ambitous when I am still trying to get to grips with the UK flora!

I am currently looking for a Ph.D. and I would like to carry on studying bryophytes. I am waiting to hear back from a funding application at the moment so am keeping my fingers crossed.

TBG Notice-board

International Association of Bryologists (IAB) meetings: The next IAB meeting will be in 2007 in Kuala Lumpur, Malaysia. Visit the new IAB website at: http://www.bryology.org for more details and information on joining the IAB.

News on IAB membership: undergraduate and graduate students can join IAB free for their first year of membership. Contact Blanka Shaw blanka@duke.edu for membership information and to join the IAB.

Tropical Bryology

Vol. 26 of *Tropical Bryology* was published in 2005. This volume contains checklists of the Ecological Reserve of Gurjaú and Distrito Federal in Brazil, of Réunion and a Catalogue of Costa Rican hepatics and hornworts.

To subscribe to this journal contact Jan-Peter Frahm (<u>bryologie@uni-bonn.de</u>). Each volume is charged separately at around £10 per volume. Information on the journal can be found on the website of University of Bonn (section 'journals'):

http://www.bryologie.uni-bonn.de

Attempt to produce a Spanish Bryology Textbook failed

The necessary basis for every student, who wants to develop interest in bryology, is the presence of a textbook. When asked the question, Why there are no students interested in bryology in such a large country as Chile? Prof. Ramirez from the University of Valdivia replied: "why should there be students, there is no textbook"! This is especially a problem for Latin American students who have do not have sufficient knowledge of English to use textbooks written in English. We experienced this in courses on Tropical bryology run in Latin America - the students were not able to follow lectures in English.

Another problem is finding the right textbook, even in English. Books like that of Schofield is based on systematics; other aspects of bryology are treated only briefly. The book "Bryophyte Biology" by Shaw & Goffinet may be a bit hard to digest for beginners, and also it does not cover all aspects of bryology.

This gave me the idea that my German textbook "Biologie der Moose" could perhaps be translated into Spanish. The book was written for students and should be at the right level. Text and illustrations are all on the computer thus it would be very easy to overwrite the German text with a Spanish one.

Several years ago, I tried to realize this project and looked for somebody to translate and print the book. After some unsuccessful attempts to contact bryologists who speak both Spanish and German, someone was found who agreed to translate the book. He obtained the necessary software and started very enthusiastically. However, finding a printer was not so easy. First, the German publisher contacted publishers in Latin America, but in vain, Later, colleagues from Colombia agreed to print the book for a cost of 4000 US\$. Finally, the University of Mérida Press was convinced to take over the printing. On top of this 5000 US\$ was requested for the translation (about 20\$ per page), and several attempts to get this money failed.

I am writing this story of an unsuccessful project to show that we are aware of the need for the promotion of tropical bryology and of the importance of a bryology textbook as a basis for this. There have been attempts to realise this and to support tropical bryology but that these attempts tend to fail.

In principal it is possible to pre-finance the printing costs of such a book. Alternatively I could do it myself and would get the printing costs back from the sale (no need for US\$ 4000 in advance). However, the requested costs for translation alone would raise the costs for each single book by about 10-15 US\$. A solution is needed. Maybe someone has an idea as to how we can realize this project. *Jan-Peter Frahm*

News from the BM

The bryophyte herbarium at the London Natural History Museum (BM) is one of the largest in the world, and probably contains more type specimens than any other bryophyte herbarium. We have been fortunate in receiving two grants recently for documenting moss type specimens at BM. The first is now complete, and involved scanning herbarium sheets of type specimens, as well as the original protologues; a library of the original handwriting of bryologists was also created. About 2000 type specimens were scanned, and it is hoped that a website with search facilities will be available shortly. To maximise the number of taxa documented,

specific authors were targeted, where it was known that BM was the main repository. These included H.N. Dixon, Bescherelle and Hampe. This also meant that many of the types were from the tropics. Angela Newton was responsible for arranging the funding from GBIF, and Gisela Oliván was almost solely responsible for executing the project, including designing and developing the associated database.

The second project is yet to start, but will concentrate on African moss taxa. This is larger than the GBIF project, and focuses on an area of particular interest to the TBG. It is hoped that taxonomic work in Africa will become significantly easier when the project is completed, for bryologists worldwide. Brian O'Shea will also produce a full list of all names used for African moss taxa as part of the project, which could be as many as 5000.

Brian O'Shea (brian@brianoshea.demon.co.uk) and Len Ellis (l.ellis@nhm.ac.uk)

Corrections to Volume 19.

Syntrichia amphidiacea (Müll. Hal.) R.H. Zander was reported as having been found new for Africa in Vol. 19 of the TBG newsletter. In fact, this species was not new to Africa. It has previously been collected from Zimbabwe, Tanzania, Uganda and from KwaZulu-Natal (see O'Shea (1995). Check-list of the mosses of sub-Saharan Africa. Tropical Bryology 10: 91-198, and subsequent versions).

An article in *Tropical Bryology* 16 (1999) detailed collections of Matcham 1035c, Porley 483f and 5a, from Uganda. The latter collection was also published by Sollman in *Tropical Bryology* 14: (1998) 21-24. An article in the *Journal of Bryology* 23 (2001) detailed collections from KwaZulu-Natal (Matcham 5272a, 5276a and a Peter Martin collection s.n. from 1993).

This species is also known from the Cape Verde Islands. *Howard Matcham*

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The BBS-TBG website

The TBG website is currently hosted by the Natural History Museum, London and can be reached directly at:

http://www.nhm.ac.uk/hosted_sites/bbstbg/ or via the BBS home page under the menus 'Bryological Portal' or 'Activities.'

The TBG site provides easy access to the TBG documents / newsletters / publications, MALOU

project information, on-line keys, TBG progress reports, TBG membership list and links to three other websites / projects of particular interest : Bryology Research; Tropical Guide bryophytes of Africa (GBA); Checklist of mosses of North Africa.

Hedwig-Schwägrichen Types Catalogue:

Part 1 – the Hedwig moss names

Catalogue and on-line database

Johannes Hedwig played an important role in the development of early bryology. He published his pioneering observations on mosses (including on antheridia, protonema and sporophytes) and descriptions of new species throughout his career (Hedwig, 1782, 1784, 1787-1797, 1798, 1799). Arguably his most important contribution to bryology today was through his posthumously published work Species Muscorum Frondosorum (SMF), (Hedwig, 1801).

Information on the life and work of Hedwig is available in Florschütz (1960), Margadant (1968), and contributions to the '2000 Hedwig Symposium' published in Nova Hedwigia, (Volume 70). This symposium contained a series of papers on Hedwig: his life and work (Frahm, 2000), the Hedwig-Schwägrichen herbarium (Geissler, 2000), his bibliography (Wisseman, 2000), published biographical information on him (Wagenitz, 2000), and on Hedwig's influence on the classification of mosses in modern times (Vitt, 2000) are presented.

SMF was designated as the starting point of moss nomenclature (except Sphagnum). In this book 369 mosses, excluding Sphagnum, were described from Europe, North America and some tropical localities. After the designation of SMF as the starting point of moss names the Hedwig herbarium became of great importance for the establishment of the correct application of moss

Efforts have been made to typify or lectotypify the Hedwig moss names (for example, Bednarek-Ochyra & Ochyra, 1994; Cardot, 1899; Fife, 1996; Frahm & Geissler, 1985; Frisvoll, 1984, 1986; Geissler & Frahm, 1995; Hedenäs & Geissler, 1999; Koponen, 1979, 1980; Lewinsky-Haapasaari & Isoviita, 1999;Ochyra, 1989; Peterson, 1977; Pursell, 1986; Price, 2002) because of the significance of these collections to moss nomenclature (Geissler, 2000).

The Hedwig herbarium, known as the Hedwig-Schwägrichen herbarium after it was bought, worked on and added to by Christian Friedrich Schwägrichen, is housed in the bryophyte part of the herbarium (G) of Conservatoire et Jardin botaniques de la Ville de Genève (CJBG).

A recent project at CJBG has been to catalogue the Hedwig collections and produce a database of protologue, label and typification information for the Hedwig moss names. In addition to recording the information seen on the herbarium labels digital scans of the herbarium sheets have been captured. From this information a catalogue has been complied and it will be published in Boissiera in December of 2005.

An on-line database of the Hedwig specimens is now available through the website of Conservatoire et Jardin botaniques de la Ville de Genève: http://www.ville-ge.ch/cjb/ (section des données') or 'bases directly http://www.ville-ge.ch/cjb/bd/hedwig/index.php

The second part of this project, currently underway at CJBG in collaboration with Eva Maier, is the databasing and scanning of the Schwägrichen collections based supplemental volumes of Species Muscorum Frondosorum (Schwägrichen 1811-1816, 1823-1827, 1827-1830, 1842). Publication of this volume is foreseen for the end of 2006, with an on-line database to accompany it.

Literature.

Bednarek-Ochyra, H. & R. Ochyra. 1994. Lectotypification of *Racomitrium aciculare* (Musci, Grimmiaceae). Fragm. Flor. Geobot. 39: 103-111.

Fife, A. J. 1996. Lectotypification of Weissia radians Hedw., a neglected name for a widespread Australasian moss species, with notes on the status of Funaria glabra Tayl. and the typification of some other Hedwigian names. J. Bryol. 19: 39-48.

Florschütz, P. A. 1960. Introduction to Hedwig's "Species Muscorum," pp. v-xxii. In Facsimile edition to J. Hedwig's Species Muscorum Frondosorum. H. R. Engelmann (J. Cramer), Weinheim.

Frahm, J.-P. 2000. The life and work of Johannes Hedwig. Nova Hedwigia 70: 1-13.

Frahm, J.-P. & P. Geissler. 1985. Lectotypification von Dicranum flexuosum Hedw. (Campylopus flexuosus (Hedw.) Brid.). Cryptogamie, Bryol. Lichénol. 6: 287-290.

Frisvoll, A. A. 1984. Lectotypificatuon of Racomitrium affine, R. heterostichum, R. microcarpon, R. obtusum, and R. sudeticum. J. Hattori Bot. Lab. 57: 299-318.

- Frisvoll, A. A. 1986. Lectotypificatuon of *Racomitrium lanuginosum* (Hedw.) Brid. Lindbergia 12: 83–86.
- Geissler, P. 2000. The Hedwig herbarium and its importance for the nomenclature of mosses. Nova Hedwigia 70: 15–23.
- Geissler, P. & J.-P. Frahm. 1995. Lectotypification of *Barbula ruralis* Hedw. (*Tortula ruralis* (Hedw.) Gärten., Meyer & Scherb.). Cryptogamie, Bryol. Lichénol. 16: 157–164.
- Hedenäs, L. & P. Geissler. 1999. Lectotypification of Hedwig names: holarctic pleurocarpous mosses. Candollea 54: 417– 432.
- Hedwig, J. 1782. Fundamentum historiae naturalis muscorum frondosorum, concernens eorum flores, fructus, seminalem propagationem, adjecta generum dispositione methodical, iconibus illustrates. 2 vols. Lipsiae [Leipzig].
- Hedwig, J. 1784. Theoria generationis et frutificationis plantarum cryptogamicarum Linnaei mere propriis observations et experimentis superstructa; dissertation quae praemio ab Academia imperiali Petropolitana pro anno 1783 proposito ornate est; auctore Joanne Hedwig...Petropoli [St. Petersberg]
- Hedwig, J. 1787-1797. Descripto et adumbratio microscopico-analytica muscorum frondosorum nec non aliorum vegetantium e classe cryptogamica Linnaei novorum dubiisque vexatorum auctore Joanne Hedwig. M.D. 4 vols. Lipsiae [Leipzig].
- Hedwig, J. 1798. Theoria generations et frutifications plantarum cryptogamicarum Linnaei, retracta et aucta. C. tab. Coloratis. Ed. 2. Lipsae [Leipzig].
- Hedwig, J. 1799. Filicum genera et species recentiori methodo accomodatae analytice descriptae a Ioanne Hedwig... iconibusque ad naturam pictis illustratae a Romano Adolpho filio... Lipsae [Leipzig].
- Hedwig, J. 1801. Species muscorum frondosorum descriptae et tabulis aeneis lxxvii coloratis illustratae. Opus posthumum editum a Frederico Schwaegrichen...Lipsae [Leipzig]. i–iv. 1–352.
- Koponen, T. 1979. Miscellaneous notes on Mniaceae (Bryophyta), IV. Typification of Hedwig's species of Mniaceae. Ann. Bot. Fennici 16: 79–89.
- Koponen, T. 1980. The typification of *Rhodobryum roseum* (Musci, Bryaceae). Ann. Bot. Fennici 17: 192–194.
- Lewinsky-Haapasaari, J. & P. Isoviita. 1999. Lectotypification of *Orthotrichum anomalum*

- and *O. striatum* (Musci). Lindbergia 24: 145–148.
- Margadant, W. D. 1968. Early bryological literature. A descriptive bibliography of selected publications treating Musci during the first decades of the Nineteenth Century and especially the years of 1825, 1826 and 1827. i-xi, 1-277. Pittsburgh, Hunt Botanical Library.
- Margadant, W. D. & P. Geissler. 1995. Seventeen proposals concerning nomina conservada for genera of Musci. Taxon 44: 613–624.
- Ochyra, R. 1989. Lectotypification of Schistidium pulvinatum (Hedw.) Brid. (Musci: Grimmiaceae) and its consequences. Nova Hedwigia 48: 85–106
- Petersen, W. 1977. Clarification of the nomenclature of *Dicranum condensatum*. Bryologist 80: 365–368.
- Price, M. J. 2002. Designation of a lectotype for the moss *Weissia calycina* Hedw. (*Holomitrium calycinum* (Hedw.) Mitt.). Candollea 57: 45–53.
- Price, M. J., Palese, R. & L. Kneubuehl. 2004. *Catalogue des Types d'Hedwig*: Electronic Publication: http://www.villege.ch/cjb/bd/hedwig/index.php
- Pursell, R. A. 1986. Typification of Hedwig's species of *Fissidens*. Bryologist 89: 35–41.
- Schwägrichen, C. F. 1811-1816. Species Muscorum Frondosorum, *Supplementum Primum*. Leipzig (J. Barth) & Paris (Treuttel & Würz).
- Schwägrichen, C. F. 1823-1827. Species Muscorum Frondosorum, *Supplementum Secundum*. Leipzig (J. Barth) & Paris (Treuttel & Würz).
- Schwägrichen, C. F. 1827-1830. Species Muscorum Frondosorum, *Supplementum Tertium*. Leipzig (J. Barth) & Paris (Treuttel & Würz).
- Schwägrichen, C. F. 1842. Species Muscorum Frondosorum, *Supplementum Quartum*. Leipzig (J. Barth) & Paris (Treuttel & Würz).
- Vitt, D. H. 2000. The classification of mosses: Two-hundred years after Hedwig. Nova Hedwigia 70: 25–36.
- Wagenitz, G. 2000. Bibliography of biographical literature on Johann Hedwig (1730-1799). Nova Hedwigia 70: 61–64.
- Wilczek, R. & F. Demaret. 1982. Etude des types de huit espèces du groupe *Bryum capillare* Hedw. Bull. Jard. Bot. Nat. Belg. 52: 439–462.
- Wissemann, V. 2000. Bibliographie der Drucke und Manuskripte von Johannes Hedwig (1730-1799). Nova Hedwigia 70: 45–60.
- Michelle Price

Contributions to the TBG website

The coordinator is seeking contributions to the TBG website (keys/treatments to tropical genera, travelogues of field trips, pictures of tropical bryophytes, interesting bryological finds, details of research activities of members, or as links to published works on-line from other project or institutional websites).

Books

Frontiers in Bryology: Physiology, Molecular Biology and Functional Genomics. 2004. A. J. Wood, D. J. Cove and M. J. Oliver (Editors). Pages 1-216. Kluwer Academic Publishers. ISBN 1402019963 − £ 63.

Molecular Systematics of Bryophytes: Progress, Problems and Perspectives. 2004. B. Goffinet, V. Hollowell and R. Magill (Editors). Pages xi-xvii, 1-448. Volume 98. Missouri Botanical Garden Monographs in Systematic Botany. ISBN 1930723385 - \$ 64.95.

If anyone is aware of, or has published / reviewed other books of interest to TBG members, please send the details, book titles or your reviews to the TBG coordinator (address below).

The next IBC meeting in 2011

The next International Botanical Congress will be held in Melbourne, Australia from 23-30 July in 2011.

Coordinator: Michelle J. Price

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BRITISH BRYOLOGICAL SOCIETY

TROPICAL BRYOLOGY GROUP NEWSLETTER

Edited by Michelle J. Price

No. 21 November 2006

Annual General Meeting

The 2006 TBG AGM was held at the *BBS AGM* and *Bryological Symposium* in the School of Life Sciences, University of Hertfordshire, Hatfield, Herts, AL10 9AB, UK.

TBG AGM AGENDA

- 1. Notes of last AGM
 - 2. Matters arising
- 3. TBG expeditions
- 5. Any other business
- 6. Place & date of next TBG AGM

BBS Tropical Bryology Group AGM 10 September 2005 Notes of Meeting

Present: Tom Blockeel, Jeff Duckett, Nick Hodgetts, Liz Kungu, David Long, Howard Matcham, Angie Newton, Brian O'Shea (notes), Roy Perry, Ron Porley, Michelle Price (chair), Daniella Schill, Jonathon Sleath, Hermann Stieperaere, Alain Vanderpoorten.

Apologies: Malcolm Watling, Mark Seaward.

1. Notes of the last AGM (see Newsletter 20). Accepted.

2. Matters arising

- AP 1. Zach Magombo had responded positively about a trip in (probably) 2007, just after the rainy season, but had not replied to a subsequent email from Michelle Price. It was pointed out that 2007 was also the date for the biennial IAB meeting in Kuala Lumpur.
- AP 2. David Long suggested that the TBG could attend the IAB South African trip in 2009, being organised by Terry Hedderson, but thought it might be possible to organise Darwin funding for a Malawi trip, provided

the load is spread, and Zach Magombo was able to support a Darwin-type project (training. building infrastructure etc.). suggested that National However. he Geographic might be a better source of funding, and would contact them. We would need a concrete invitation from Malawi, with details of what they would like us to do, with an emphasis on the need for us to provide training in field work.

- AP 3. Michelle Price said there was a possibility of a visit to Madagascar in 2006-7, but they were particularly interested in student participation, and no funding would be available for travelling to Madagascar. Michelle added that Claudine Ah-Peng had invited TBG members to visit Réunion, but again no funding would be available for travel.
- AP 4. Michelle Price had looked again at the TBG objectives, and although in general they needed no change, they could be implemented more expeditiously by splitting responsibilities, such that the coordinator acted as a business manager and produced the newsletter, but other activities, such as expeditions would be taken over by other individuals (expedition project leaders). This suggestion was accepted.

3. TBG Expeditions

See action points.

4. New TBG Objectives

See AP 4 from last meeting, and new AP 3.

5. Any Other Business

- **1.** Michelle Price announced that there have been 10 new members to the TBG over the last three years.
- **2.** Michelle Price mentioned that the new Andrew Mellon Foundation African Plants Initiative was

something of interest for TBG members as both the BM and G have projects with the Mellon Foundation. Angie Newton described a new Mellon project to scan all the African type specimens in BM (London Natural History Museum). An advert had been placed to recruit someone full time for a year to assist with this task. Michelle Price described a project that had been submitted to the Mellon Foundation to database the Stephani African type material from G, a pilot project that would then be expanded to include all the African bryophyte types in G.

6. Place and date of next TBG AGM.

University of Hertfordshire, Hatfield, after the BBS AGM.

Action Points

- 1. Michelle Price / David Long to establish whether Zach Magombo was still keen to pursue a trip in 2007,
- 2. Depending on a positive response from Malawi, David Long to pursue funding for a trip.
- 3. Michelle Price to consider whether any amendment is necessary to the TBG objectives following AP 4 and send these to members present at the meeting for comment.

Change in TBG coordinator

Due to her new family commitments Michelle Price is to hand over the role of TBG coordinator to Joanna Wilbraham. Joanna is currently working on the African Plants Initiative project at the Natural History Museum, London. Email: j.wilbraham@nhm.ac.uk

Contributions to TBG newsletters

The TBG newsletter relies on contributions from members, especially for the section 'news of members,' and for information on bryological research activities, information on publications and for any features included.

Please send your contributions for future TBG newsletters, at any time, to Joanna Wilbraham at:

j.wilbraham@nhm.ac.uk

Journal of the Hattori Botanical Laboratory

Zen Iwatsuki, Editor of the *Journal of the Hattori Botanical Laboratory*, announced over *Bryonet* that due mostly to financial reasons the production of this journal would cease after the issue of Volume No. 100. Back issues of the *Journal of the Hattori Botanical Laboratory* are available through the page:

http://www7.ocn.ne.jp/~hattorib/journal.html

On the bryological listserv *Bryonet* (bryonet-1@mtu.edu) the bryological community reacted strongly to this news offering both praise for one of the really outstanding bryological journals, noted for being one of the few journals that publishes often long taxonomic works, and sadness that it was to come to an end. A small group of bryologists have got together to discuss the future of this journal and whether it can be saved.

The African Plants Initiative project at the Natural History Museum, London

The African Plants Initiative (API), funded by the Andrew Mellon Foundation, is an international partnership collaborating to produce an online database of scholarly information about African plants. This database will largely consist of high-resolution images and label data of type specimens contributed by the partner herbaria. The NHM received funding in Autumn 2005 to employ a member of staff for one year to work on the digitisation of African moss type specimens from Africa and Madagascar (liverworts and hornworts are not included in this project). Original estimates of the number of African types in the herbarium were in the region of 4,000 and nine months into the project this is proving a relatively accurate figure. specimens have been digitised at the time of writing and we hope to complete this project by the end of the year.

Type specimen sheets are being scanned using inverted flat bed scanners at 600 dpi and accompanying label information is recorded into a database. We are attempting to validate each specimen as being type material with an accompanying record of at least the collector, collector number, locality information and determinations. However, the time limitations of the project restrict the level of research that can be undertaken. It appears that only 60% of the

type specimens in the herbarium are marked up in red type folders, which leaves 40% of type specimens scattered amongst non-type material. During the course of this project we are sifting through the whole of the African collections, searching for unmarked types. This is an interesting and valuable exercise in curation, though it places an extra time burden on the API target deadlines.

At the annual meeting of the API project in Cape Town (February 2006), concerns were raised about the value of imaging moss herbarium specimens. A high-resolution image of a flowering plant specimen is usually sufficient to allow accurate identification, while mosses require microscopic examination. However, the images of moss specimens convey the plants macro-features, make important label data accessible and often include other valuable information such as attached protologues, determinations, annotations and illustrations. Several major herbaria are now providing moss type data for the API project and it is hoped that this will inspire more herbaria to move towards digitising their bryological collections.

The New World is the next focus for the Mellon Foundation and at the NHM we are currently putting together a funding application to digitise the Latin American moss types (*Index Muscorum* regions Am 2–6). Our initial estimates suggest we hold 8,000 type specimens from these regions, which should keep us busy for another two years!

Jo Wilbraham

African Plant Initiative (API) - sub-Saharan Africa moss synonyms

As part of this project, I was asked to provide a list of all synonyms of sub-Saharan African mosses. Working in the UK requires us to know very little about names that are no longer in use, although things have become more hectic recently, with more new names every year. In areas where taxonomy is less mature, synonyms become more important as different names are used in different countries for the same taxon, and many names may be doubtful as they have never been reviewed since they were created a century or more ago.

I had started work on this as part of the next edition of the sub-Saharan moss checklist, but incorporating this into the API requirement from BM (London Natural History Museum) meant that I had to complete the project by this September, and this proved to be a time-

consuming project. The sub-Saharan moss list has always incorporated relevant synonyms (4010 in the last checklist), but extracting a full list was a project of unknown size, and I estimated that there would be 6-9000 synonyms in total. The final total looks like being a little over 7000.

Index Muscorum has been the Bible for muscologists for 50 years, containing as it does all published moss names, together with the authors and the publishing details, and with the currently used name if it is a synonym. The 5 volumes include 3138 pages, covering almost 50,000 names. As well as the extremely high quality of the entries, we are fortunate that geographic distribution is also recorded for each taxon (where known), based on a geographic system of 10 divisions related to moss distribution. This meant that the sub-Saharan Africa synonyms were usually quite easy to identify, and despite knowledge of bryophyte distribution improving considerably over the half century since publication, comparatively few mistakes were detected. Since 1962, six more supplements have been added, thanks to the activities of Missouri Botanic Garden, and MBG staff also produced a checklist which estimated the likely number of distinct taxa world-wide as 12,800, based on estimates of names that were currently in active use - suggesting that only about a quarter of existing names should be

To produce the synonym list, starting with the existing sub-Saharan checklist, every *Index* Muscorum entry with the appropriate African code was checked against existing synonyms, and new synonyms were added to the list. The high level of bryological activity since 1962 means that a lot of new synonyms have been created, but most of these are already on the list, and it's mainly the historic records that were missing. As well as validly published taxa, the list also includes many nomina nuda (including details of the collections on which they are based, when this is available), and also valid taxa that are no longer used (e.g. taxa that have slipped out of use but never been formally synonymised, or taxa where the type specimen is lost, or where there are more than one species in the type). Writing in mid-August, the list still needs extra effort, but hopefully, bryologists in Africa will soon be able to follow up names without access to 5 volumes of Index Muscorum and 6 Index of Mosses supplements.

Brian O'Shea

Africa Plant Initiative project at G: Databasing of the Stephani African Types

A small-scale project, funded by the Andrew W. Mellon Foundation (USA) under their African Plant Initiative (API) program, began in Geneva in September of 2006. The aim of this project was to database (specimen label information), scan and barcode all the Stephani African hepatics type material in G. Digitalised information on the African types will later be available through the website of Conservatoire et Jardin botaniques de la Ville de Genève (http://www.ville-ge.ch/cjb/) and through the centralised database for the API project, namely the organisation ALUKA (http://www.aluka.org/?cookieSet=1).

The Franz Stephani hepatic collection at G contains over 11,000 specimens, including those for the 5000+ names described by Stephani himself in his 6 volume treatise Species Hepaticarum. Seen by some as a curse upon the advancement of hepatic taxonomy Species Hepaticarum is none-the-less one of the more significant bryological publications of its time. Stephani's herbarium was developed during the course of his work on Species Hepaticarum and contains collections that he received on exchange from colleagues and other prominent botanists at that time, and those that he received from all over the world for determination. It is thus one of the richest collections of hepatics, in terms of geographical and taxonomic diversity, available and one that is crucial in the study of hepatic taxonomy. A review of Stephani's Species Hepaticarum has recently been published by Prof. S. R. Gradstein:

Gradstein, S. R. 2006. Stephani's Species Hepaticarum revisited. *Willdenowia* 36 (1 *Special Issue*): 557-563.

Because of the *Index Hepaticarum* project which is based at G (for the years 1853-1973), the Stephani hepatic names and associated protologue information is already available electronically. All the Stephani names and information were exported from the *Index Hepaticarum* project to the newly created Stephani Types database which is specimen rather than nomenclature based. This new database allows us to manage the images and add specimen bar-code information in addition to holding information on the Stephani specimens themselves (such as label details).

All of the Stephani herbarium sheets of African types, often with multiple collections per

new name, were scanned using HerbScan scanning units to a specification of 600 dpi. This process captures the specimen label and the barcode associated with each individual specimen. The herbarium packets were then opened and material inside carefully prepared for scanning. The HerbScan scanning technology was then used to select the specimen and re-scan the magnified area at 600 dpi resulting in a high quality image of the plants themselves (size of the collection itself permitting). The final image for each specimen was compiled using Adobe® Photoshop® so that the herbarium sheet with specimen label and barcode are seen along with the scan of the specimen itself. More information on 'Digitalisation' of herbarium specimens can be found through the Royal Botanical Gardens, Kew website:

http://ftp.rbgkew.org.uk/data/herb digitisation.html

The Stephani project at G will finish at the end of February 2007 with results made immediately available through the two previously cited internet addresses (CJB and ALUKA). So far the scanning process has gone according to the initial time estimates with between 10-15 specimens scanned per day, depending on the specimens. This includes time taken to scan the specimen, the plant itself and to make a composite image of the two scans. The time taken to locate the specimen in the herbarium, to prepare the specimen (we aimed at facilitating the long-term conservation of these specimens and packets by remounting labels from fragile packets and replacing any worn herbarium sheets / covers) and to enter label information in the Stephani Types database is not included in the calculation of 10-15 specimens per day.

Information of the African Plants Initiative project can be found though the following www links or publications:

www links

South African National Biodiversity Institute (SANBI)

http://www.sanbi.org/research/api.htm Royal Botanic Gardens, Kew

http://www.kewgardens.org/herbcat/gotoApi.do
Andrew W. Mellon Foundation

http://www.mellon.org/conservation.html
Publication:

Smith G. F. 2004. The African Plants Initiative: a big step for continental taxonomy. Taxon 53: 1023-1025.

Michelle J. Price

TBG 70 / news21 - November 03 2006

News of Members

Ida Bruggeman-Nannenga, a specialist of the genus *Fissidens* from Africa and longstanding TBG member, published her treatments of *Fissidens* from Uganda in the Journal of Bryology - *Flora of Uganda* series.

Bruggeman-Nannenga, M. A. 2006. Bryophyte flora of Uganda. 6. Fissidentaceae (Part 1). *J. Bryol.* 28: 53-62.

Bruggeman-Nannenga, M. A. 2006. Bryophytes flora of Uganda. 6. Fissidentaceae (part 2). *J. Bryol.* 28: 139-148.

In 2005 Dr. Bruggeman-Nannenga published two new species from Africa and continues her research on this group, especially on the taxonomy of the African members of the genus. Bruggeman-Nannenga, M. A. 2005. Two new species of *Fissidens* (Fissidentaceae, Musci) from Africa, *Fissidens harringtonii* and *Fissidens artsii*. Tropical Bryology 26: 13-17.

Martin Wigginton: spent five weeks on St. Helena in October and November of 2005 undertaking a bryophyte survey. This was part of an ongoing project, implemented by the St. Helena National Trust and supported by the UK Overseas Territories Environment Programme, to develop a protected area management plan for the Diana's Peak National Park. My primary aim was to document the bryoflora of the Peaks area, especially of the remaining native tree-fern cabbage-tree communities, but I also collected elsewhere on the island.

The present survey has shown the bryoflora to be more diverse than previously thought, though not notably rich, and so far about 70 species have been added to the 55 previously reported. Several of these are *sp. nov.*, with more suspected but awaiting proper study. *Fissidens* might prove to be especially interesting, with perhaps 14 species to add to the two that have been described from the island.

About 24 species appear to be endemic, some of which are vulnerable, e.g. *Lejeunea sanctae-helenae*, sparse on a few young trees in a small area of the Peaks; *Sphagnum helenicum*, in small quantity and threatened in both of its two known locations.

The bryoflora includes many introductions, most of which appear to be benign. However, *Pseudoscleropodium purum* is aggressive and rampant in open areas in the National Park right up to the summits, is locally invading native communities, and threatens the survival of at

least one species. The National Trust aims to start a programme of control for *P. purum*, and to develop recovery programmes for threatened bryophytes on the island.

I also spent a week on Ascension, and with permission of the Conservation Dept., was able to collect bryophytes in the newly designated Green Mountain National Park. The bryoflora of this much younger island is strikingly different from its near neighbour, with few shared species. Most of the bryological interest is in the upper parts of Green Mountain, whose slopes are often shrouded in mist, with frequent rain. Notably common on wet ash cliffs were *Isotachis aubertii*, *Chiloscyphus ascensionis* and *Mastigophora diclados*, and in the bamboo 'rainforest' on the summit, *Anastrophyllum piligerum*.

The collections will eventually be housed at RBGE, with a sub-collection held on St. Helena.

Martin Wigginton

New members/Change of address

Kien-Thai Yong, from Institute of Biological Science, Faculty of Science, University of Malaya, 50603 Kuala Lumpur, Malaysia.

Tropical Bryology

As of 2007 there will be a change in editorship for *Tropical Bryology*. Jan-Peter Frahm, after 17 years in the role of editor, will hand over this responsibility to Yelitza León (Mérida, Venezuela) and Dietmar Quandt (Dresden, Germany).

Volume 27 of *Tropical Bryology* was published in March of 2006. This volume contains articles include a revision of *Radulina* W.R. Buck & B.C. Tan, a preliminary inventory of the Aneuraceae in Venezuela, new records of hepatics and hornworts from Panama, new records of mosses from Dominican amber, new bryophyte records from Cáceras, Brazil, Tikehau Atoll, South Pacific, Thailand's Chiang Mai province and a new *Sphagnum* species from the Azores.

To subscribe to this journal contact Jan-Peter Frahm (bryologie@uni-bonn.de). Each volume is charged separately at around £10 per volume. Alternatively see the Tropical Bryology website at: http://www.bryologie.uni-bonn.de

IAB World Conference on Bryology

This IAB meeting will be held in Kuala Lumpur, Malaysia on 22 -27 July 2007. Details of the meeting are to be found at: http://www.bryology2007.net/ and any queries and suggestions can be addressed directly to patrick@um.edu.my.

IAB information: students can join the International Association of Bryologists (IAB) free for one year. Information for joining is on the IAB website http://www.bryology.org/>.

ABLS meeting 2007 in Mexico

The 2007 American Bryological Lichenological Society (ABLS) meeting is to be held in Xalapa, México. The organiser of this meeting is Dr. Efraín De Luna (Departamento de Biodiversidad y Sistemática, Instituto de Ecología AC, Apdo. Postal 63, Xalapa, Veracruz, 91070 Mexico). Details of this meeting are available on the following website: http://www.filogenetica.org/ABLS07/default.htm

The BBS-TBG website

The TBG website is currently hosted by the Natural History Museum, London and can be reached directly at:

http://www.nhm.ac.uk/hosted_sites/bbstbg/ or via the BBS home page under the menus 'Bryological Portal' or 'Activities.'

The following document has been added to the TBG website:

Bryophyte floras in the digital age - floras for those who can't afford books by Brian O'Shea, Natural History Museum, London, United Kingdom (**TBG69**).

Contributions to the TBG website

The coordinator (see details below) is seeking contributions to the TBG website (keys/treatments to tropical genera, travelogues of field trips, pictures of tropical bryophytes, interesting bryological finds, details of research activities of members, or as links to published works on-line from other project or institutional websites).

current coordinator: Michelle J. Price

Conservatoire et Jardin botaniques de la Ville de Genève, Case Postale 60, CH-1292 Chambésy-GE, Switzerland.

Tel: 022 418 5148 (International +41 22 418 5148) email: Michelle.Price@cjb.ville-ge.ch

New TBG Coordinator in 2007: Joanna Wilbraham, Botany department, Natural History Museum, Cromwell Road, London SW7 5BD. Email: j.wilbraham@nhm.ac.uk

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BRITISH BRYOLOGICAL SOCIETY

TROPICAL BRYOLOGY GROUP

NEWSLETTER

Edited by Joanna Wilbraham

No. 22 September 2007

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TBG MEETINGS

BBS Tropical Bryology Group AGM 9th September 2006

Notes of Meeting

Present: Jeff Bates, Tom Blockeel, Nick Hodgetts, Brian O'Shea, Roy Perry, Ron Porley, Herman Stieperaere, Jo Wilbraham.

Apologies: Liz Kungu, Michelle Price.

Agenda

- 1. Notes of the last AGM meeting. Accepted.
- 2. Matters arising.

AP 1. Michelle Price notified her resignation as Coordinator of TBG, following the birth of her son and impending return to full time work. Jo Wilbraham agreed to take over this role. Accepted.

Jo has been implementing the bryology aspects of the African Plants Initiative (API) activities at the Natural History Museum (BM), documenting and scanning African type specimens.

AP 2. As neither Michelle Price (maternity leave) nor David Long (field work in China) were present, there was little to discuss on TBG expeditions (see AP 2 & 3 from the last meeting), but see item 3 (Expeditions). Coordinator to pursue.

AP 3. A TBG Progress Report had not been produced for 2004 or 2005, and these should be consolidated into a 2006 report for *Field Bryology*. Coordinator to pursue.

AP 4. Slow progress continued on both GBA (Guide to Bryophytes of Africa) and MALOU (Mosses and Liverworts of Uganda), although there were no more contributions available yet to the latter. MALOU editors to pursue (Messrs O'Shea and Hodgetts).

3. Expeditions

- 1. Malawi. No progress has been made, so far as is known, although Johannes Vogel (Keeper of Botany, BM), recently indicated support for a Darwin Initiative bid to be made.
- 2. Réunion Island. Claudine Ah-Peng from Réunion was willing to organise a BBS trip, and those present were in favour of progressing with this. However, no offers were received to organise this.

4. Progress

For GBA, work is in active progress, with Martin Wigginton working on several

pleurocarpous genera, and Jo Wilbraham on the Orthotrichaceae, although many of the volunteer authors are making nil or slow progress. Progress on GBA is shown on the TBG website, with the actual contributions appearing on the GBA online website (www.GBAonline.org.uk).

5. Any Other Business. None.

6. Place and date of next TBG AGM.

Liverpool 29th September 2007, following the BBS AGM meeting.

Action Points

- **AP 2.** Coordinator to liaise with Michelle Price and David Long regarding TBG Expeditions.
- **AP 3.** Coordinator to liaise with Michelle Price and Brian O'Shea to produce a TBG Progress Report covering 2004-6 for *Field Bryology*.
- **AP 4.** MALOU (Mosses and Liverworts of Uganda) editors O'Shea and Hodgetts to chase recalcitrant authors to produce their contributions.

NEWS OF MEMBERS

Bryophytes on Saba

William R. Buck New York Botanical Garden

Saba is a small Dutch island in the Caribbean, part of the soon-to-be-dissolved Netherland Antilles. It is only 5 square miles, but reaches an elevation of 877 m and is thus the highest point in the Kingdom of the Netherlands. There are four small villages on the island, the capital being The Bottom. The island is essentially little more than a dormant volcano and thus Saba has a very rugged topography. There are no beaches and no permanent freshwater on the island, both of which severely limit tourism. However, habitats range from dry coastal scrub through dry deciduous forest to rain forests and, finally, a cloud forest on the summit of Mt. Scenery. Like other Caribbean islands, hurricanes have played a major role in shaping the vegetation.

Several years ago, Conservation International led a team of scientists to inventory the well-known diving destination, Saba Bank. New species of fish and algae were discovered. At the request of the Saba Conservation Foundation, Conservation International next began a terrestrial survey of the island. Because of previous contacts, CI contacted me at The New York Botanical Garden to organize a plant survey of the island. I invited Dr. Scott Mori and his wife, Carol Gracie, to take charge of the vascular plants. I was in charge of the bryophytes (and lichens). In August 2006 we made our first visit to Saba. To reach the island you have to go through St. Maarten. From there you can either get a 12 minute flight on a small prop plane, which lands at what is boasted to be the world's shortest commercial runway, or there are two ferries that make regular trips back and forth from St. Maarten to Saba. We took the flight but our equipment went via a ferry. We were assisted in our fieldwork by Mike Smith from Conservation International and Paul Hoetjes from the Department of Environment and Nature (MINA) in Curação. We had 10 days on the island and each day was spent collecting. The island has only a single road that goes from the airport on the northeast corner of the island to

the dock on the southwest corner. However, because of the lack of roads for most of its history, Saba has developed an extensive system of foot paths that cover many parts of the island. Hikers and the aforementioned scuba divers comprise the vast majority of tourists on the island. The trail system was a real advantage for our botanical team. The trail to the summit of Mt. Scenery is even paved. Needless to say, on an island with no permanent freshwater, the cloud forest atop Mt. Scenery was by far the richest collecting. Prior to leaving, I tried to find someone to identify any hepatics that I might collect on the island. However, since I was unsuccessful. I limited my collecting to mosses and lichens. Harrie Sipman, a Dutch lichenologist holding a position at the Berlin Botanical Garden, had previously collected lichens on Saba in 1980 and agreed to identify any lichens that I might collect. Because a large percentage of the island is quite dry, lichens made up a healthy percentage of my collections. Finally, though, I was able to get to the cloud forest on Mt. Scenery. Unfortunately, it rained the entire day at the summit (thus explaining the cloud forest), but it didn't deter me from collecting. The only previous extensive bryophyte collecting on the island was done in 1980 and 1981 by Paulien Wiersma, as part of a thesis project from the University of Utrecht. Almost all mosses collected by Wiersma were refound, as well as quite a few additional species. During my stay on Saba I made just over 400 collections. All the mosses have been identified from that first trip. In order to make the information more accessible to the local people on Saba, we have put up a website (follow link below). There is a checklist of bryophytes so far known from the island with links to the specimens.

In March 2007, we returned to Saba. This time, though, I was able to get Denise Pinheiro da Costa to agree to identify my hepatic collections. Also, this time we took along Harrie Sipman to collect lichens, thus allowing me to focus more closely on bryophytes. From the website you will see that most of the vascular plants have field images of the species, as well as scanned herbarium sheets. On the first trip, very few cryptogams were photographed. However, on this second trip more of an effort was made to photograph the common bryophytes in the field. The material from that trip is not yet identified, but as it is it will become available on the website. The ultimate goal is to make the website a virtual natural history museum for a

small island with a population of less than 1500, which will probably never be able to afford a real natural history museum.

Conservation International has already come up with funding for another island. In February 2008 we are scheduled to move onto St. Eustatius, another small island in the Netherlands Antilles.

Plants and Lichens of Saba: http://sweetgum.nybg.org/saba

A new types digitalisation project underway at G: Databasing of the Stephani non-African liverwort types: a GBIF.ch project

Michelle Price & Annick Lang Conservatoire et Jardin botanique de la Ville de Genève

A recent Andrew W. Mellon Foundation (African Plants Initiative) sponsored project at G, to database the African liverwort types from the Franz Stephani herbarium, saw the digitalisation of over 800 type specimens from this collection. These represented 618 of the 800 names that Stephani described from African material. For the remaining 182 names, specimens were mostly out on loan at the time of the project and these specimens will be scanned and databased upon their return to G. The images and associated specimen label data from the API project at G will shortly be available through the ALUKA website. Updates of newly scanned specimens and data will be periodically sent to ALUKA to ensure that all the African type material from within the Stephani collection is eventually available "electronically."

As an invaluable compliment to the above digitalisation effort the Swiss node (GBIF.ch) of GBIF international have sponsored a project to database the non-African Stephani types at G. Stephani authored over 5000 new species of liverworts during his career, many of them described in his epic series Species Hepaticarum (Stephani, 1898-1925). See a recent article by Gradstein (2006) for an account of Stephani and the effects of his work Species Hepaticarum on hepaticology today. To date just under 2500 Stephani type specimens from Europe, Asia, South and Central America. North America and Oceania have been scanned and databased. Scans of the herbarium sheet, packet and label are made with a HerbScan scanning unit to a

specification of 600 dpi (ca. 200 mb per image). An additional scan of the specimen at 1200 dpi is then made and superimposed back on to the digital image of the specimen sheet. The scan is then saved in a "tiff" format. The high resolution image of the specimen facilitates "zoom in" capacity when images are available electronically. Label information is entered into the database "Système d'informations botaniques (SIBG)" of Conservatoire et Jardin botanique de la Ville de Genève (G). It is foreseen that all the digitalised data on the Stephani types will be accessible through the upcoming *Index Hepaticarum* on-line database to be launched through the G web site in 2008.

One of the interesting outcomes of the databasing aspect of the project has been the acquisition of information on the geographical extent of the collections seen by Stephani, and subsequently included in his herbarium collection. The Stephani collection contains material from all over the World but we have found that South America, Asia and Oceania are the three regions with the largest numbers of type specimens described from them. So far we have over 350 collectors in the database for Stephani type material including specimens from collectors such as Benjamin Balansa (Paraguay, Vietnam), Per Karl Hjalmar Dusén (East Africa), Père Urbain Jean Faurie (Japan, Taiwan), Augustus Fendler (Venezuela), Theodore Herzog (Bolivia), Louise and Auguste-Josef Le Rat (New Caledonia), Erik Olof August Nyman (Indonesia, New Guinea), Carl Purpus (Mexico), Victor Felix Schiffner (Brazil), Richard Spruce (Ecuador, Peru), Johannes Elias Teijsmann ("Teysmann") (Borneo, Java, Sumatra), Max Fleischer (Java), Adolphe Tonduz (Costa Rica), Ernst Ulé (Brazil), Rev. William Walter Watts (Australia), Friedrich Martin Josef Welwitsch (Angola), Thomas Whitelegge (Australia), and Charles Wright (Cuba), as well as more obscure persons who may have only collected one or two specimens and about whom little is known. It is intended to do a more detailed analysis of the types in the Stephani herbarium (information on the type collections, collection localities and collectors) when the GBIF.ch project reaches a conclusion, and once as much as possible of the material currently out on loan has been processed upon its return to G.

References

Gradstein SR. 2006. Stephani's *Species*Hepaticarum revisited. Willdenowia
36(Special Issue): 557–563.

Stephani F. 1898-1925. Species Hepaticarum.
Georg & Cie, Genève, Bâle & Lyon, 6
volumes.

Web addresses:

ALUKA - http://www.aluka.org/
GBIF.ch - http://www.gbif.org/
GBIF - http://www.gbif.org/

Epiphytic bryophytes of Ecuador

Jenny Rowntree *University of Manchester*

I joined the TBG after teaching on a University of Manchester tropical field course in 2006. This year I have been to back to Ecuador and also to Belize. I have been undertaking a small project in collaboration with Joanna Wilbraham (NHM) looking at the abundance of tropical epiphytic bryophytes and their associations with host trees. I have had a number of students from Manchester working with me on this, one of whom spent a few weeks with Joanna and Len Ellis at the NHM working in the bryophyte herbarium. Preliminary results will be presented at the British Ecological Society winter meeting this year in Glasgow and we hope to write up our results for publication in the near future.



The Payamino region, Amazonia, Ecuador. Photo: J. Wilbraham

Handbook of Malesian Mosses – the pleurocarp volumes

Angie Newton
The Natural History Museum, London

During the recent meeting of the IAB in Kuala Lumpur (July 2007) a workshop was held to discuss plans for completion of the Handbook of Malesian Mosses. The three volumes treating the acrocarpous mosses were completed by Alan Eddy at NHM between 1988 and 1996, but although he started work on the leucodontalean families, nothing had been published on the pleurocarpous mosses at the time of his death in 1998. The Malesian region includes Malaysia, all the large and small Indonesian islands, the Philippines and the island of Papua, but not continental Asia (other than Peninsula Malaysia), Australia or the Pacific islands.

Producing the treatments for the remaining volumes will require a different strategy from that followed by Alan Eddy. Rather than being a "one-man-band" there will be a number of contributors from different countries, including those of the Handbook area (Malaysia, Singapore, Indonesia, Brunei and the Philippines). We will continue with the Handbook style, i.e. not aiming at a full floristic or monographic revision, but covering the known species with descriptions, illustrations and keys. In order to get this completed within a reasonable time-span (5-7 years), we will focus on the collections in the major European herbaria (BM, S, H, PC, L) plus those regional herbaria with good recent collections in Singapore, Bogor and Kuala Lumpur, as well as some of the Japanese herbaria. There may also be some limited additional collecting, probably focused on biodiversity hot-spot areas that are poorly known for mosses.

Web resources will play an important part in the new project. As treatments are finished, they will be posted on the web, together with additional material such as photographs and maybe interactive keys. The existing acrocarp volumes may also be scanned and posted on the web, together with a preliminary key to the taxa covered in these volumes. If any TBG members are interested in helping scan the existing volumes, or have web skills and would be interested in helping design and set up the website, please let us know!

When sufficient family level treatments have accumulated, these will be produced as a book. However, since the classification of the pleurocarpous mosses is current poorly resolved, higher level relationships will not be imposed. The first families to be completed will be included in the first pleurocarp volume to be published, families finished later will go in the subsequent volumes. We intend to produce the books so that they are affordable to as many users as possible, while still keeping a reasonable standard of production.

If interested in participating in this project, please contact the editors Angie Newton (a.newton@nhm.ac.uk), Ben Tan (dbsbct@nus.edu.sg) or Brian O'Shea brian@oshea.demon.co.uk

A little from a Sub-Saharan Africa bryophyte teacher

Bashir Yusuf Abubakar Ahmadu Bello University, Zaria, Nigeria. Email: bashiry04@yahoo.com

With delight, I have just been included in the membership list of the TBG, thanks to many linkages via the internet and the listening ears of the likes of Dr A.E. Newton and J. Wilbraham. Through my educational endeavours, and precisely in 1985(during my A level training), I was exposed to the small but beautiful group of the mosses and liverworts. However, much to do about my experiences with these plants, particularly their classification/taxonomy, remains a problem. It reaches to a point in my days of the undergraduate at the university posing out a question to our herbarium keeper that 'why identification of these plants is proving impossible?' The response I got was that the former lecturer in the department responsible for the bryophytes went along with the voucher specimens of the mosses and other bryophytes at the expiration of his contract with the university. Incidentally the former lecturer was an expatriate.

Since education is a dynamic process the study of these plants in the department continues but the students working on them will have to bear with the cost of taking their samples to the forestry herbarium, Ibadan for identification. This means, that they have to cover a distance of 700-800km to be assisted in researches involving taxonomy, ecology, and the present interest in

monitoring environmental changes etc. This effort seems to be rewarding but, unfortunately last year the staff in charge of the mosses passed away!

With the realisation of these experiences and my present disposition of being a member of staff of my Alma matter I decided to offer a little contribution by engaging myself and undergraduate project students to the taxonomy of this group. However, our little effort needs to be complimented by ensuring that whatever identification effort is made should be authenticated by an expert in the related field. Last year I was linked to Dr A E Newton of the Natural History Museum, London for such assistance. I have sent to her a manageable number of mosses collected within my university campus for identification, and she has shown her willingness to assist (however, I have to look for continuity considering her tight schedule of dealing with the bryophytes of the world!).

Finally, I would like to use this opportunity to request for complimentary assistance / collaboration in the taxonomy of this important plant group from a sub-Saharan institution.

Phylogeny of the Polytrichopsida

Neil E. Bell University of Helsinki

Following my work over the last few years on phylogenetic relationships and character evolution in the earliest diverging pleurocarps, my co-authors and I will be publishing a paper in the July issue of The Bryologist (Bell et al. 2007 - publications p.8) that includes a number of higher-level taxonomic changes and new combinations. Of most interest to tropical bryologists will be the reinstatement of Mniodendron at the generic level to include those species previously placed in Hypnodendron section Comosa (i.e. including Mniodendron dendroides, widespread in S. E. Asia), the placement of many of the other tropical S. E. Asian species of Hypnodendron in Dendro-hypnum, and the description of Touwiodendron gen. nov. for Hypnodendron diversifolium. There are also major changes at the family level, the most tropically relevant being the inclusion of Spiridens (as well as Franciella, Bescherellia and Cyrtopus) in an emended *Hypnodendraceae*.

I am now based at the Botanical Museum of the University of Helsinki and working mainly on the phylogeny of the Polytrichopsida, although I continue to be involved with pleurocarpous mosses, particularly those of southern temperate regions.

MEETINGS & EXPEDITIONS

Bryophyte Flora of Réunion Island – A taxonomic workshop and field meeting Forthcoming... July 2008

Research on the bryophyte flora of Réunion Island is currently being undertaken by the Université de La Réunion and the Muséum National d'Histoire Naturelle. The objective of this project is to produce a publication which will include species descriptions and identification keys for the island. Once complete, this text book will be used to encourage bryology among local students and assist with conservation planning.

To complete the flora, collaboration is required with bryologists with specialist knowledge of particular bryophyte groups. The TBG has been

invited by the Réunion-Paris team to visit the island to assist with research for the flora. This meeting will largely take the form of a taxonomic workshop, to be held over 10 days in July 2008. The assembled bryological team will battle with the rich and diverse Réunion bryoflora and hopefully make good progress reworking and testing identification keys and dealing with more problematic groups. The meeting will also incorporate bryological training for local botany students, forest officers and conservation planners. In addition, collecting trips will be made to various underrecorded areas of Réunion to increase knowledge of the known flora and provide material for study in workshop sessions.

For more information contact Joanna Wilbraham: j.wilbraham@nhm.ac.uk

IAB meeting: Bryology in Asia in the new millennium

23-27 July 2007

The biennial meetings of the IAB are worth attending for meeting old (and new) friends as much as hearing the presentations, but this year at the meeting in Malaya it would be difficult to choose your schedule. All the 150-ish attendees were located at the same hotel in which the presentations were given, so it became a particularly good opportunity to both chat and listen. Unfortunately there were days when it became difficult to decide which of two parallel sessions to visit. Nevertheless we all managed to see most of the sessions we wanted, and so far as the TBG was concerned, good progress was made in discussing future activities, as well as enjoying trips to parts of Malaysia and Indonesia.

Phylogenetics probably represented the majority of presentations, but there were also sessions on chemistry, morphology, eco-physiology, conservation, biodiversity and taxonomy. More specifically, TBG members contributed:

Claudine Ah-Peng: Diversity, distribution and biogeography of bryophytes on lava flows of the Piton de la Fournaise volcano (Réunion Isl.).

Jeff Bates: Salinity tolerance and survival of rocky seashore bryophytes.

Neil Bell: Current developments in the phylogeny of the Polytrichopsida.

Jeff Duckett: Fungal associates in bryophytes.
(also presented Karen Renzaglia's paper:
Evolution of the hornwort chloroplast revealed).

Rob Gradstein: Keynote speech: Neotenic bryophytes. Also: A phylogeny of the Porellaceae based on nuclear and chloroplast DNA sequences.

Lars Hedenäs: Morphological and molecular data suggest different relationships among species of *Acroporium* Mitt. and closely related genera (Sematophyllaceae).

David Long: Bryological exploration of the Gaoliging Shan, Yunnan, China.

Zach Magombo: (no presentation).

Angela Newton: The southeast Asian genus Pterobryella and the identity of Pterobryon australasiae Dixon. Also: The Handbook of Malesian Mosses - towards completion of the pleurocarp volumes (workshop – see separate report p.5).

Brian O'Shea: Current status and future opportunities for bryological research in Sri Lanka (talk given by first author: Nimal Gunatilleke).

Ron Porley: Bryophyte conservation in Europe - a review of progress.

Lars Söderström: Species richness and richness of range restricted species among Malesian hepatics - Implications for conservation.

Ben Tan: Remarks on the progress of Asian moss biodiversity studies.

In addition there were a number of trips arranged after the Conference; visits were made to Cameron Highlands (Malaya), Java and Mt. Kinabalu.

The next IAB meeting will be in South Africa in July/August 2009, organised by Terry Hedderson, who is promising exciting endemics on the field trips. The timing will mean that the South African bryophytes will be at their best.

Brian O'Shea



Above - Tea plantations at the Cameron highlands

Below - Participants of the IAB meeting

Photos: Brian O'Shea



PUBLICATIONS

Papers in the series: British Bryological Society Expedition to Mulanje Mountain, Malawi

- **17.** Sematophyllaceae (Bryopsida): Pt. 1. O'Shea BJ, Tan BC. 2006. *Journal of Bryology* 28: 360–362.
- **18.** *Cololejeunea lichenyae*, **sp. nov.** (**Hepaticae**, **Lejeuneaceae**). Wigginton MJ, Hodgetts NG, Porley RD. 2007. *Journal of Bryology* 29: 7–11.
- **19. Metzgeriaceae and other unpublished records.** Pócs T. 2007. *Tropical Bryology* (In Press)

Papers in the series: Mosses and Liverworts of Uganda

8. Calymperaceae – L. Ellis (Coming soon...)

Recent additions to the online 'Guide to bryophytes of sub-Saharan Africa' http://www.gbaonline.org.uk/

February 2007

Orthotrichaceae

October 2006

Leucomiaceae & Daltoniaceae August 2006

Hypopterygiaceae & Adelotheciaceae

Recent publications relevant to tropical bryology - Books

Newton AE, Tangney RS. (eds.) 2007.

Pleurocarpous mosses: systematics and evolution. Systematics Association Special Volume.

- Journal articles
- **Akiyama H. 2006.** New records of mosses from Thailand. *Tropical Bryology* 28: 59.
- **Akiyama H. 2006.** New synonymy of *Chaetomitriopsis glaucocarpa* (Hypnaceae, Musci). *Tropical Bryology* 28: 61.
- **Bell NE, Quandt D, O'Brien TJ, Newton AE. 2007.** Taxonomy and phylogeny in the earliest diverging pleurocarps: square holes and bifurcating pegs. *The Bryologist* 110: 533–560.

Benavides JC, Duque M, Alvaro J, Duivenvoorden JF, Cleef AM. 2007.

Species richness and distribution of understorey bryophytes in different forest types in Colombian Amazonia. *Journal of Bryology* 28: 182–189.

- Ellis LT. 2007. A revision of the moss Syrrhopodon spiculosus Hook. & Grev. (Calymperaceae, Bryopsida) and associated taxa, including two new species described from Borneo. Journal of Bryology 29: 64–78
- **Fischer E, Killmann D, Sérusiaux E. 2006.** A new species of Jonesiobryum (Bryopsida: Rhachitheciaceae) from Uganda. *Journal of Bryology* 28: 177–181.
- **Jia Y, He X, Xu J. 2006.** Notes on two species of *Brotherella* (Bryopsida: Sematophyllaceae) from Asia. *Journal of Bryology* 28: 268–271.
- Morales T, Garcia M. 2006. Catalogo anotado de las especies venezolanas de musgos (Bryophyta) pertenecientes al Herbario Nacional de Venezuela (VEN). *Tropical Bryology* 28: 103–147.
- Orbán S. 2006. Studies on African Calymperaceae, VII. New records and identification key of species of the nonleucobryoid Calymperaceae species of Madagascar. *Tropical Bryology* 28: 49–58.
- O'Shea BJ. 2006. Checklist of the mosses of sub-Saharan Africa (version 5). *Tropical Bryology Research Reports* 6: 1–252. www.tropicalbryologyresearch.co.uk
- **Sollman P. 2006.** Studies on some Pottiaceous mosses from Africa 2. *Tropical Bryology* 28: 1–3.
- **Staples GW, Imada CT. 2006.** Checklist of Hawaiian Anthocerotes and Hepatics. *Tropical Bryology* 28: 15–47.
- Stieperaere H, Matcham HW. 2007.

Notothylas orbicularis (Schwein.) Sull. in D. R. Congo and Uganda, new to Africa and N. *javanica* (Sande Lac.) Gottsche new to D. R. Congo (Anthocerotophyta, Notothyladaceae). *Journal of Bryology* 29: 3–6.

- **Touw A. 2006.** New, amended, or revised typifications of tropical Southeast Asian mosses described by F. Dozy, J.H. Molkenboer, R.B. van den Bosch, and C.M. van der Sande Lacoste. *Tropical Bryology* 28: 79–90.
- **Wigginton MJ. 2006**. Bryophytes of St Helena, South Atlantic Ocean. 1. Three new species

of *Cololejeunea* (Jungermanniales, Lejeuneaceae), *C. dianae* sp. nov., *C. sanctae-helenae* sp. nov. and *C. grossestyla* sp. nov. *Journal of Bryology* 28: 363–373.

Wigginton MJ. 2007. Bryophytes of St Helena, South Atlantic Ocean. 2. *Lejeunea* sanctaehelenae sp. nov. (Jungermanniales, Lejeuneaceae), an unusual species with a hooded lobule. *Journal of Bryology* 29: 12–17.

Wilbraham J. 2007. Taxonomic notes on the pantropical genera *Macromitrium* and *Macrocoma* (Bryopsida: Orthotrichaceae). *Journal of Bryology* 29: 54–59.

Wolseley P, Ellis L, Chimonides J. 2007.
Corticolous lichen and moss communities in

lowland dipterocarp forests under differing management regimes. *Bibliotheca Lichenologica* 95: 583–603.

Zhu R. 2006. *Cololejeunea dauphinii* nom. nov. for *Cololejeunea tixieri* M.Morales & G.Dauphin from Panama (Jungermanniopsida: Lejeuneaceae). *Journal of Bryology* 28: 277–277.

The following document has been added to the BBS-TBG website www.nhm.ac.uk/hosted_sites/bbstbg

Mosses and the African Plants Initiative

J. Wilbraham, The Natural History Museum, London.

NOTICEBOARD

Tropical bryophyte collections at the Natural History Museum, London

The Natural History Museum, London (BM) has one of the largest collections of bryophytes in the world, holding in excess of 900, 000 specimens. Some 100, 000 specimens are unidentified and yet to be studied. Among these are many collections relatively recently collected from tropical regions, notably Malesia, India, Africa and the Seychelles.

These collections are available for study by visitors to BM (visits by arrangement), or through loan to similar institutions. Within the UK, tropical bryologists remote from London and not officially attached to an institution may examine BM material under the auspices of an appropriate institution local to them (provided the institution is willing to accept responsibility for a loan from BM and able accommodate the bryologist).

TBG folk interested in working on unidentified tropical collections held in BM should get in touch with:

Len Ellis Curator of Bryophytes Department of Botany The Natural History Museum Cromwell Road London SW7 5BD Tel.: 020 7942 5150

e-mail: <u>l.ellis@nhm.ac.uk</u>

The Augustin-Pyramus de Candolle Prize

The Geneva "Société de Physique et d'Histoire naturelle" (SPHN) is pleased to announce that in 2008 it will award the Botany Prize, named the AUGUSTIN-PYRAMUS DE CANDOLLE PRIZE which will recognize the author or coauthors of the best monograph of a genus or family of plants. Monographs to be considered should be unpublished or published after 31st December 2005.

The monograph should be a complete coverage of the group considered and include its arrangement in a system of hierarchical classification. It should also contain descriptions of external morphological characters and internal characters - anatomical, caryological, physiological and molecular - as far as they can be used to distinguish the sub-groups. A complete bibliography, critical synonymy, and identification keys are requested, and the work should comply with the International Code of Botanical Nomenclature.

Partial treatments, i.e. a monograph of a subfamily, tribe, sub-genus or section, would be acceptable provided that the group is defined clearly with respect to its neighbours. The Prize is open to authors of any nationality or domicile. The text may be written in Latin, French, German, English, Italian, Spanish or Portuguese. A summary, restricted to a maximum of 4000 words, must be provided in French or English.

Two copies of the manuscript, along with author's *curriculum vitae*, must be submitted to the following address before 31st March 2008:

Augustin-Pyramus de Candolle Prize, Conservatoire et Jardin botaniques de la Ville de Genève, Case postale 60, 1292 Chambésy-GE, Switzerland. The award is CHF 5000. The reward may be reduced, or not awarded, if insufficient works are received or those received do not fulfil the criteria of this notice. The Prize will be awarded in October, 2008. The selected monograph remains the property of the author; a copy will be kept at the SPHN.

For any further information, please contact: **prix-candolle.cjb@ville-ge.ch**

Contributions to TBG newsletters

The TBG newsletter relies on contributions from members, especially for the section 'news of members', and for information on bryological research activities, information on publications and for any features included. Digital photographs accompanying articles are also very welcome if the quality is sufficient to be reproduced in the printed newsletter.

Please send your contributions for future TBG newsletters, at any time, to the coordinator (details below).

TBG coordinator: **Joanna Wilbraham**Botany department, The Natural History Museum, Cromwell Road, London SW7 5BD. **Email: j.wilbraham@nhm.ac.uk**

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BRITISH BRYOLOGICAL SOCIETY

TROPICAL BRYOLOGY GROUP

NEWSLETTER

Edited by Joanna Wilbraham

No. 23 September 2008

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TBG MEETINGS

British Bryological Society - Tropical Bryology Group AGM

29 September 2007

Present: Tom Blockeel, Jonathan Graham, Nick Hodgetts, David Holyoak, Liz Kungu, Howard Matcham, Jenny Rowntree, Herman Stieperaere, Malcolm Watling, Jo Wilbraham.

Apologies: Ron Porley

Agenda

1. Notes of the last AGM meeting. Accepted.

Matters arising.

1) Réunion.

Updates on plans for a taxonomic workshop & field meeting on Réunion Island have been communicated to members via email & the TBG

newsletter over the last few months. Much interest was expressed at the meeting though some concern over dates was made as a July trip may clash with commitments to the BBS summer meeting on Shetland. (See Action Points 1 & 2). This meeting would largely take the form of a taxonomic workshop. In summary – participants with some expertise in a particular taxonomic group, and an interest in providing training to local botanists, working as a bryological team to assist Réunion/Paris researchers with a planned bryophyte flora of the island. Some taxonomic collaboration is likely required pre / post trip.

2) Future TBG interest in an expedition to Ecuador? Jenny Rowntree is currently involved in teaching an annual undergraduate fieldcourse & research expedition to Ecuador with the University of Manchester. Jenny has been undertaking bryophyte ecology projects &

specimen collection and has been forging bryological links with PUCE University in Quito (see note in recent TBG newsletter). Ecuador would provide an interesting future destination for TBG work, possibly building on collaborations & projects initiated by Jenny.

GBA / MALOU Progress

For GBA (Guide to Bryophytes of Africa), while many of the descriptive accounts are now completed, a good number still require illustrations. Jonathan Graham volunteered to help with extra illustrations if required.

Slow progress has continued with MALOU though contributions are still incoming. Len Ellis has completed the Calymperaceae which is currently in press & Jo Wilbraham is approaching completion of the Orthotrichaceae account. David Holyoak is eager to continue with the Bryaceae though recent taxonomic reconscription of the group means he would now like to include *Brachymenium* (specimens of which currently reside with Terry Hedderson). Terry to be pursued over the potential relinquishment of these specimens to David, if willing.

Any Other Business. (none)

6. Place and date of next TBG AGM.

Preston Montford, 11th October 2008, following the BBS AGM meeting.

Action Points

AP 1. Coordinator to continue to liaise with Claudine Ah-Peng (Réunion trip instigator) regarding the planning of the field meeting on Réunion next summer. In particular, to check flexibility of proposed dates. Co-ordinator to send group email soon with updates & also a current checklist of the bryophytes of Réunion (to be generated by Brian O'Shea), after further discussion with Claudine & other TBG members.

AP 2. TBG members interested in contributing to the Réunion taxonomic workshop & field meeting to contact the co-ordinator (Jo W.), if possible with a particular taxonomic group which they would be able to have some expertise in during the workshop.

AP 3. Co-ordinator to produce a TBG Progress Report covering 2007 for *Field Bryology* at the end of the year.

NEWS OF MEMBERS

African moss checklist

Brian O'Shea The Natural History Museum, London

The last version of the checklist of sub-Saharan Africa mosses was published in December 2006, and will be updated during the next year. The previous version contained some errors and omissions and hopefully these will be remedied.

The major addition in the last edition was the inclusion of all African synonyms, which more than doubled the volume, but apart from additions and corrections, I'm not sure what else should be added. At present I'm thinking either of highlighting first collections for each species, and/or for highlighting all the African endemics.

Unfortunately these changes will have to be done manually, as the software used to produce the list was written about 15 years ago, and can no

longer be adapted. Incidentally, if anyone has experience in MS Access and could assist in adapting an existing system, I would be very pleased to hear from you.

Bryophytes in Ethiopia

Kristoffer Hylander, Stockholm University kristoffer.hylander@botan.su.se

I am currently running a research project in SW Ethiopia that might interest the members of the TBG. The project deals with biodiversity in montane rainforests and agroecosystems surrounding the town of Bonga, and how different types of management, especially different types of coffee systems, influences species richness and composition. My main study organisms are bryophytes, even if I also study vascular plants and birds. The project is financed by the Swedish International

Development cooperation Agency (SIDA) and I collaborate with Dr. Sileshi Nemomissa at Addis Abeba University.

I collected my first data in October to December 2006, which now is on its way to be published. You can find a first paper published online in Frontiers in Ecology and the Environment (Hylander and Nemomissa 2009, http://www.frontiersinecology.org/).



Calyptothecium hoehnelii (Müll. Hal.) Argent – a new record for Ethiopia. Photo: Kristoffer Hylander.

Not many bryologists have worked in Ethiopia and the bryophyte flora is apparently quite unknown. I have already encountered numerous species not previously recorded from Ethiopia just from going through the specimens collected from my random quadrats. If more systematic

inventories of different types of habitats such as stream-side forests, springs, wetland margins, ditches, and rocky outcrops would be conducted I am sure that plenty of interesting stuff would be found just in the region where I have been working. The forests of Southwest represent the wettest parts of Ethiopia and will probably stand out as the most species rich part of the country in terms of bryophyte diversity. On the other hand there are few high mountains in this area, so the elevational range is smaller compared to some other regions.

My intention is to identify as much as possible of the species that I encounter during my inventories, but undoubtedly this is a difficult task. This is especially true since I am an ecologist and can't spend too much time hanging around in herbaria. I can get a quite good picture of what is going on by just naming the species A and B, but as I said I am keen to get as many correct names as possible. Fortunately I have got much help from various colleagues who have checked quite a few of my identifications. Thanks to Tamás Pócs, Jiří Váňa, Lars Hedenäs, Ida Bruggeman-Nannenga, Jan-Peter Frahm, Ricardo Garilleti, and Johannes Enroth!

The paper we have published and those we are working on are papers with a conservation focus including not only data on bryophytes but also on other groups. My intention, however, is to also publish the floristic news that the project has brought about so far.

If anyone is interested in bryology in Ethiopia, don't hesitate to contact me, and if anyone is interested in looking at material and helping me to verify my identification of species in certain genera or so, I would be thankful. In October 2008 I will go back for a new field work period searching for patterns of species richness and compositional changes related to isolation and time since disturbance. Thus more to come...

MEETINGS & EXPEDITIONS

Background to the Tropical Bryology Group workshop in La Réunion

September 2008

The first meeting of the Tropical Bryology Group on La Réunion will be taking place shortly after this newsletter is circulated. Several members of the TBG will be collaborating with colleagues on La Réunion, where the workshop will be hosted by the University of La Réunion. Some background to the project is given here and a report of the meeting will be produced for circulation via the TBG newsletter / website.

The Mascarene Islands are recognised hotspots of bryological diversity and sit at an interesting

biogeographical border, exposed to influences from continental Africa to the west and from Indo-Malesia to the east. Réunion Island in particular has a rich bryoflora with many alleged endemics. Much of this under-studied diversity is conserved within the natural forest that still covers some 30% of the island's surface. There are currently very few floristic works on tropical African bryophytes though the bryophyte flora of the Mascarene Islands has been comparatively well documented with collections. Presently La Réunion counts 753 species of bryophytes divided into 449 species of mosses (57 families and 159 genera) and 304 species of liverworts and hornworts (33 families and 86 genera). Presently 68 species of mosses and 16 species of liverworts are known to be endemic from Réunion.

Since 2003, Jacques Bardat undertook the elaboration of the Flora of Liverworts of the Mascarene Islands with Claudine Ah-Peng. The Liverwort and Hornwort Flora of the Mascarene Islands will be an illustrated book, including identification keys, species descriptions, ecology and distribution of liverworts and hornworts for the islands, with a focus on La Réunion Island which has been more investigated by the authors. Once completed, this text book will be used to encourage bryology among local students and assist with conservation planning.

To complete the flora, collaboration is required with foreign bryologists with specialist knowledge of particular bryophyte groups. During this taxonomic workshop in La Réunion, experts will collaborate on the liverwort and hornwort flora by testing the keys on fresh specimens and adding their comments, teaching on their family or genera of expertise and making collections of bryophytes from under-collected areas on the island. This meeting will also be the opportunity to initiate the Moss Flora of the Mascarenes. The presence of experts of tropical bryology on the island will also provide the opportunity to train local botanical amateurs and professionals in the knowledge of bryophytes.

IAB meeting in South Africa

August 2009 - dates to be confirmed

The next biennial meeting of the International Association of Bryologists (IAB) will be held in the Western Cape Province of South Africa. The host institution will be the University of Cape Town, and the meeting will be coordinated by Pr. Terry Hedderson.

Further information will be posted on the IAB website:

http://www.bryology.org/

PUBLICATIONS

Papers in the series: Mosses and Liverworts of Uganda

7. Calymperaceae and Octoblepharaceae

L. Ellis, 2007Journal of Bryology 29: 259–274

8. Orthotrichaceae,

Part 1. Macromitrioideae

– J. Wilbraham, 2008 *Journal of Bryology* 30 (In press)

Recent Tropical Bryology Articles

- If you have recent publications which you would like to be included in this section, please send the reference to J. Wilbraham at any time.

Ah-Peng, C., M. Chuah-Petiot, B. Descamps-Julien, J. Bardat, P. Stamenoff & D. Strasberg. 2007. Bryophyte diversity and distribution along an altitudinal gradient on a lava flow in La Réunion. *Diversity and Distributions* 13: 654–662.

Alvarenga, L. D. P., M. P. P. Silva, J. R. P. M. Oliveira & K. C. Pôrto. 2007. New occurrences of bryophytes to Pernambuco, Brazil. *Acta Botanica Brasilica* 21: 349–360.

Alvarenga, L. D. P., R. C. L. Lisboa & A. C. C. Tavares. 2007. New liverwort records for the Caxiuana National Forest, Pará State, Brazil. *Acta Botanica Brasilica* 21: 649–656.

Aryanti, N. S. & S. R. Gradstein. 2007. Wallace's line and the distribution of the liverworts of Sulawesi. *Cryptogamie Bryologie* 28: 3–14.

Avendanő-Torres, K. & J. Aguirre-C. 2007. Los musgos (Bryophyta) de la region de Santa Mariá-Boyacá (Colombia). *Caldasia* 29: 59–71.

Barbosa-C., I., J. Uribe-M. & L. Campos. 2007. Las hepàticas de Santa Marià (Boyacà,

- Colombia) y alrededores. *Caldasia* 29: 39–49.
- **Da Costa, D.P., & C.P. De Faria. 2008.**Conservation priorities for the bryophytes of Rio de Janeiro State, Brazil. *Journal of Bryology* 30: 133–142.
- **Frahm, J.-P. 2006 [2007].** New and interesting *Campylopus* records from tropical countries. *Tropical Bryology* 28: 155.
- Freire, V. 2006. Biodiversidad de hepàticas y antocerotes en Guatemala. In E. B. Cano (ed.), *Biodiversidad de Guatemala* 1: 55–68. Universidad del Valle de Guatemala, Guatemala.
- Freire, V. & N. Salazar Allen. 2006.

 Introduccion a la diversidad de las briofitas en Guatemala. In E. B. Cano (ed.),

 Biodiversidad de Guatemala 1: 49–53.

 Universidad del Valle de Guatemala,

 Guatemala.
- Freire, V. & R. E. Stotler. 2007. Typifications of the names of some Latin American species of *Fossombronia* (Fossombroniaceae). *The Bryologist* 110: 817–823.
- **Gradstein, R., & M. E. Reiner-Drehwald. 2007.** The status of *Neopotamolejeunea*(Lejeuneaceae) and description of a new species from Ecuador and southern Brazil. *Systematic Botany* 32: 487–492.
- **Hedenäs, L. 2008.** Molecular variation and speciation in *Antitrichia curtipendula* s. 1. (Leucodontaceae, Bryophyta). *Botanical Journal of the Linnean Society* 156: 341-354.
- Jiménez, J. A. 2007. Bryoerythrophyllum berthoanus [sic] comb. nov. and B. sharpii (Pottiaceae) in South America. Journal of Bryology 29: 125–130.
- Jiménez, J. A. & Cano, M.J. 2008.

 Didymodon hegewaldiorum (Pottiaceae), a new species from the Tropical Andes.

 Journal of Bryology 30: 121–126.
- **Kürschner, H. & G. Parolly. 2007.** Life forms and life strategies in tropical trunk-epiphytic bryophytes—a case study from Ecuador. *Nova Hedwigia Beiheft* 131: 121–131.
- O'Shea, B. 2007. *Meiothecium intextum* Mitt. (Bryopsida: Sematophyllaceae): an overlooked taxon from Asia and Oceania, with notes on related taxa. *Journal of Bryology* 29: 275–276.
- Pereira, A. L. D. & K. C. Pôrto. 2007. Patch size and isolation effects on epiphytic and epiphyllous bryophytes in the fragmented Brazilian Atlantic forest. *Biological Conservation* 134: 415–427.

- **Pócs, T. & J. Eggers. 2006.** New or little known epiphyllous liverworts, XIII. *Cololejeunea arfakiana* sp. nov. from West Irian (New Guinea). *Polish Botanical Journal* 51: 155–158.
- Pócs, T. & S. Pócs, S. Min, I. Chuah-Petiot, I. Malombe & S. Masinde. 2007. East African bryophytes, XXIV. Records from the dry lands of Kenya, with a description of *Didymodon revolutus* var. nov. *africanus* (Pottiaceae). *Lindbergia* 32: 33–39.
- **Pócs, T. 2007.** A sixth species of *Pictolejeunea* (Jungermanniopsida) from the Venezuelan Guyana. *Acta Botanica Hungarica* 49: 109–119.
- Pócs, T., M. C. Nair, K. P. Rajesh & P. V. Madhusoodanan. 2007. Liverwort (Marchantiopsida) records from the Western Ghats (Kerala State, peninsular India). *Acta Botanica Hungarica* 49: 121–129.
- **Pursell, R.A. 2007.** Fissidentaceae. *Flora Neotropica*. 101: 1–279. The New York Botanical Garden.
- Pursell, R.A., & F. Müller. 2008. Fissidens tumescens sp. nov. (Fissidentaceae) from Dominica and Guadeloupe. The Bryologist 111 (3): 490-493.
- Ramírez P., Bernardo R., A.T. Whittemore, & S.P. Churchill. 2008. The Bryophytes of The Department of Nariño, Colombia: II. Hepatics and Hornworts. *The Bryologist* 111 (3): 482–486
- Tan, B. C., T. Koponen & D. H. Norris. 2007.
 Bryophyte flora of the Huon Peninsula,
 Papua New Guinea. LXX.
 Sematophyllaceae (Musci) 1.
 Acanthorrhynchium, Acroporium,
 Clastobryophilum, Pseudopiloecium,
 Radulina and Trichosteleum. Annales
 Botanici Fennici 44: 35–78.
- Váňa, J. & M.J. Wigginton. 2008. Taxonomic results of the BRYOTROP expedition to Zaire and Rwanda. 34. A new species of *Amphicephalozia*, A. africana sp. nov. Journal of Bryology 30: 55–58.
- Vaz, T. de F. & D. P. Da Costa. 2006. Os gêneros Brymela, Callicostella, Crossomitrium, Cyclodictyon, Hookeriopsis, Hypnella e Trachyxiphium (Pilotrichaceae, Bryophyta) no estado do Rio de Janeiro, Brasil. Acta Botanica Brasilica 20: 955–973.
- Vaz, T. de F. & D. P. Da Costa. 2006. Os gêneros *Lepidopilidium*, *Lepidopilum*, *Pilotrichum* e *Thamniopsis* (Pilotrichaceae, Bryophyta) no estado do Rio de Janeiro, Brasil. *Acta Botanica Brasilica* 20: 975–993.

TBG Website Update

We are still continuing to add data on-line: Jo Wilbraham has provided data covering Orthotrichaceae, Part 1 Macromitrioideae, for the MALOU (Mosses and Liverworts of Uganda), and has recently provided a revised and expanded version of the GBA (Guide to Bryophytes of Africa) Orthotrichaceae, which will be uploaded shortly.

www.nhm.ac.uk/hosted sites/bbstbg

NOTICEBOARD

Bryophyte Illustrations

TBG member Malcolm Watling would like to hear from you if you are looking for an illustrator to assist with your bryological publications. Contact details (Postal address only): Tŷ Briallen, Penrhyndeudraeth, Gwynedd, LL48 6DF, UK.

Job opportunity at the Natural History Museum, London

The Museum is seeking a research assistant for an initial 6 months fixed term post (with likely extension to 18 months subject to further funding) to database and digitise its bryophyte (moss) type collections (Latin America & Asia) as part of an internationally collaborative project. You will have a degree or equivalent experience in biological sciences or a related discipline, and experience of working with biological collections and appropriate database and digitisation software. Other desirable qualities include specific experience of working with bryological collections in a taxonomic environment, a good knowledge of geography, and an understanding of plant nomenclature and typification. You will have the ability to work in a focused manner with close attention to detail, be responsible and committed, and have a positive and enthusiastic attitude.

Closing date for applications 10 September 2008

Application Information
For a full job description and to apply online,
please visit the Natural History Museum website
at www.nhm.ac.uk/jobs

Contributions to TBG newsletters

The TBG newsletter relies on contributions from members, especially for the section 'news of members', and for information on bryological research activities, information on publications and for any features included. Digital photographs accompanying articles are also very welcome if the quality is sufficient to be reproduced in the printed newsletter.

Please send your contributions for future TBG newsletters, at any time, to the coordinator (details below).

TBG coordinator: **Joanna Wilbraham**Botany department, The Natural History Museum, Cromwell Road, London SW7 5BD. **Email: j.wilbraham@nhm.ac.uk**

Published by: British Bryological Society - Tropical Bryology Group

BRITISH BRYOLOGICAL SOCIETY

TROPICAL BRYOLOGY GROUP NEWSLETTER

Edited by Joanna Wilbraham

No. 24 September 2009

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NOTICEBOARD

• Tropical bryology workshop in Costa Rica – Brent Mischler

TBG MEETINGS

British Bryological Society - Tropical Bryology Group AGM

12 September 2008

Present – Tom Blockeel, Jonathon Graham, Nick Hodgetts, Howard Matcham, Chris Preston, Jenny Rowntree, Robin Stevenson, Ray Tangney, Jo Wilbraham, Malcolm Watling, Apologies for absence – Liz Kungu

Agenda

Notes of the last AGM meeting. Accepted.

Matters arising.

- 1) Report on Taxonomic workshop on Réunion Island
 - Initial feedback on this meeting which was held just a few weeks ago [September 2008]

- The meeting was hosted by the Université de la Réunion and La Réunion Parc National.
- New and interesting records will be published by the group in a series of papers.
- A post-workshop project will also look at a provisional bryophyte red data list
- Discussion of further involvement of the TBG in the production a moss flora for the Mascarenes. Get in touch if you are interested in contributing.
- More details of the project will be placed on the TBG website

2) TBG website

The site has been renovated over the past year by Jo Wilbraham, partly due to a change in web design software but also to give a fresh look to the site. The format has been somewhat updated though the original content is still the same or expanded. Please get in touch with Jo with any comments / suggestions about development of the website and ideas for content.

Any other business

- 1) Nick Hodgetts announced his revision of *Herbertus* in Africa is now in press.
- 2) Malcolm Watling gave a reminder that he is no longer contactable by email see newsletter [News 2008] for Malcolm's postal address.

Place and date of next BBS-TBG AGM.

University of Sussex, 12th September 2009, following the BBS AGM meeting.

Action Points

AP 1) Jo Wilbraham to produce an account of the Réunion Island meeting for Field Bryology.

AP2) Réunion workshop participants to organise publication of new records for the island.

NEWS OF MEMBERS

Moss checklist news

Brian O'Shea The Natural History Museum, London

African checklist - The last version of the checklist of sub-Saharan Africa mosses was published in December 2006, and will be updated during the next year. The previous version contained some errors and omissions and hopefully these will be remedied. The major addition in the last edition was the inclusion of all African synonyms, which more than doubled the volume, but apart from additions and corrections, I'm not sure what else should be added. At present I'm thinking either of highlighting first collections for each species, and/or for highlighting all the African endemics.

Unfortunately these changes will have to be done manually, as the software used to produce the list was written about 15 years ago, and can no longer be adapted. Incidentally, if anyone has experience in MS Access and could assist in adapting an existing system, I would be very pleased to hear from you.

Other checklists - In the last year or so we have been working on Indian checklists: one for Kerala (west coast of S. India) was completed quite quickly, but checklists for some of the larger areas are taking much longer: the Tamil Nadu checklist (east coast of S. India) is taking much longer, and a further checklist of Andaman & Nicobar (island in the Indian Ocean) is underway. All of these will be published as free pdf papers. (At present we have no space to add any more on the website, and we are waiting for extra space to be provided.)

Bryological news from Itambo Malombe

Itambo Malombe National Museums of Kenya

I completed my PhD studies in bryology on 22nd April 2009 at the Koblenz Landau University, Germany. The title of my thesis was 'systematics of *Cheilolejeunea* (Spruce) Schiffn. (Lejeuneaceae) in continental Africa and its ecological significance in conservation of Kakamega and Budongo rainforests'. The supervisors were Prof. Tamas Pócs and Prof. Eberhard Fischer.



Cheilolejeunea sp. photographed on Réunion Island

Currently, I am implementing a project on epiphyllous bryophytes in Taita Hills, Kenya, funded by International Foundation for Science. The distribution of such species is almost entirely dependent on the amount of atmospheric humidity. There is a paucity of scientific information on the diversity and distribution of epiphyllous bryophytes in Kenyan ecosystems and tropical Africa in general, yet these species are important indicators of climatic change.

Bryophytes of Uganda in the Natural History Museum, London (BM)

Len Ellis, Curator of Bryophytes The Natural History Museum, London

Over 1000 unidentified bryophyte collections from Uganda are held in the Natural History Museum. The majority of these were collected in 1961 by Francis Rose and by EM Lind in the 1950's. They await determination so that they may be incorporated into the bryophyte herbarium (BM) and made readily accessible for further research.

With the aid of travel expenses provided through the BBS Bequest Fund, Mr Howard Matcham has undertaken to regularly visit BM over the next year or so, in order to identify these Ugandan bryophytes. New, or otherwise important records will be reported in the *Journal of Bryology*. The identification of these specimens will make a significant contribution to the TBG's investigation of the bryophyte flora of Uganda.

MEETINGS & EXPEDITIONS

Update on the TBG taxonomic workshop on La Réunion in September 2008

Jo Wilbraham

In September 2008, a team of 17 bryologists, mostly members of the BBS - Tropical Bryology Group, assembled on La Réunion for two weeks to participate in a taxonomic workshop and field meeting hosted by the Université de la Réunion and La Réunion Parc National. The aim of this taxonomic workshop was to bring together bryologists researching the bryophyte flora of the Mascarenes.



The tropical leafy liverwort Pleurozia gigantea

The workshop was a mix of sessions based at the university which involved testing identification keys on fresh specimens; participant led seminars presenting recent taxonomic work on a family or genus and fieldwork to make collections of bryophytes from under-surveyed areas on the

island. An important aspect of the meeting was the bryological fieldwork with local botanists and conservation managers who were interested in learning more about the diverse bryophyte flora of the island.



Early colonisation of the Piton de la Fournaise lava flows

The attendees of this meeting were Claudine Ah-Peng, Roger Lala Andriamiarisoa, Jacques Bardat, Ida Bruggeman-Nannenga, Len Ellis, Terry Hedderson, Itambo Malombe, Howard Matcham, Tamás Pócs, Ron Porley, Ana Seneca, Lars Söderstrom, Pierre Stamenoff, Dominique Strasberg, Benito Tan, Jo Wilbraham and Nicholas Wilding. Our group represented a wide array of countries which included France, Hungary, Kenya, Madagascar, the Netherlands, Norway, La Réunion, Singapore, South Africa and the United Kingdom.

Much work has already been achieved on recording the bryophyte diversity of La Réunion and an extensive database of distribution records, maintained by Pierre Stamenoff, is being further expanded by the recording efforts of this meeting. The new and interesting species records for La Réunion will be published in a

series of papers. We are also working towards a provisional 'red list' for the bryophytes of La Réunion and we hope that this will highlight the bryophyte species most in need of conservation and also indicate important areas for bryophytes on the island.

Further details about the bryophytes of La Réunion can be found on the BBS - Tropical Bryology Group website at: http://www.nhm.ac.uk/hosted_sites/bbstbg/masc arenes.htm

Or see: Wilbraham, J. 2009. Bryophytes & Volcanoes: La Réunion Island. *Field Bryology* 97(1): 24-31.

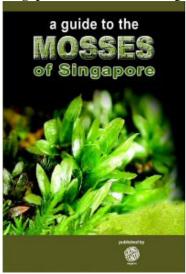
PUBLICATIONS

Recent Tropical Bryology Publications

- If you have recent publications which you would like to be included in this section, please send the reference to J. Wilbraham at any time.

Books

Tan, B.C. & B.-C. Ho (photography by Y.-H. Lim). 2008. A guide to the mosses of Singapore. Science Centre Singapore, 149 pp.



A small pocket-sized guidebook on the mosses of Singapore. Anyone who is interested could try to contact the publisher directly. See http://www.science.edu.sg/ssc/contact.jsp

Journal articles

Ah-Peng, C., Bardat, J., Strasberg, D., Stieperaere, H. 2009. Additions to the bryoflora of Réunion Island 2: Anthocerotopsida, Marchantiopsida and Jungermanniopsida from the herbarium of the National Botanic Garden of Belgium. Journal of Bryology 30 (3): 185-191

Asthana, G., Shukla, A. 2009. **Two epiphyllous species of** *Drepanolejeunea* (Spruce) Schiffn.

new to the Indian bryoflora. Journal of Bryology 31 (2): 139-142

Atwood, J.J. 2009. A taxonomic revision of *Schlotheimia* subg. Stegotheca (Orthotrichaceae). The Bryologist: 112 (2): 290-300

Bruggeman-Nannenga, M.A. 2009. **Two new African** *Fissidens* (subgenus Aloma): *F. costivelatus* and *F. curticostatus*. Journal of Bryology 31 (2): 120-124

Câmara, P.E.A.S. 2007. A new species of *Taxithelium* (Sematophyllaceae) from Seram, Indonesia. The Bryologist: 112 (3): 589-592

Cano, M.J., Jiménez, J.A. 2009. *Indusiella* (**Ptychomitriaceae**) in **South America**. The Bryologist: 112 (2): 308–314

Costa, D. P. da. & N. D. dos Santos, Jiří Váňa. 2008. **A New Species of** *Cylindrocolea* (**Cephaloziellaceae**) **from Brazil**. Bryologist 111 (4): 667-669

Engel, J.J. 2009. Studies on Lophocoleaceae (Hepaticae). XVIII.Stolonivector Engel in New Zealand, including two new species, together with comments on generic endemism of Austral Hepaticae. Nova Hedwigia 88: 335-346

Engel, J.J., Glenny, D. 2008. **Austral Hepaticae 44. A revision of** *Marsupidium* **Mitt. for New Zealand.** Nova Hedwigia: 87: 277-313

Frahm, J-P., O'Shea, B.J., Ho, B-C. 2009. **The Moss Flora of Mauritius**. Volume 51 from www.archive-for-brology.com

The mosses reported from Mauritius were compiled from the literature and are listed here with localities and references. The list includes 238 species. A summary of the bryological exploration of the island is given.

Gallego, M.T., Cano, M.J., Guerra, J. 2009. New synonymy in Syntrichia (Pottiaceae) in the Neotropics. Bryologist 112 (1): 173-177

Hodgetts, N.G. 2009. A morphological revision of the genus *Herbertus* S.Gray (Herbertaceae, Marchantiophyta) in Africa, including the East African islands. Journal of Bryology 30 (4): 239-263

Includes description of three new species of Herbertus.

Luna, E de. 2009. **Typification, taxonomy and distribution of** *Braunia squarrulosa* (Hedwigiaceae) in Mexico and Central America. Bryologist 112 (1): 202-207

Ignatov, M., Wigginton, M.J., Kuznetzova, O.I. & Huttenen, S. 2009. **Bryophytes of St Helena, South Atlantic Ocean. 3.** *Sainthelenia*, a new **genus of Brachytheciaceae** (**Bryophyta**). Arctoa 17: 91-100.

The endemic Brachythecium athrocladum is assigned to the new genus Sainthelenia.

Olson, S.L. 2009. *Pireella cymbifolia* (Pterobryaceae) new to the flora, with comments on sea level and other factors influencing the phytogeography of Bermuda. Journal of Bryology 30 (3): 224-226(3)

Schill, D.B., Long, D.G. & Köckinger, H. 2008. **Taxonomy of** *Mannia controversa* (Marchantiidae, Aytoniaceae) including a new subspecies from East Asia. Edinburgh Journal of Botany 65: 35–47.

Singh, D.K., Singh, D. 2009. **Rediscovery of** *Calypogeia aeruginosa* **Mitt.** (**Hepaticae: Calypogeiaceae**) - a long lost liverwort from **Sikkim, India**. Journal of Bryology 30 (3): 229-231

Singh, D.K., Singh, D. 2009. *Saccogynidium* Grolle (Hepaticae: Geocalycaceae) - a new generic record for Indian Bryoflora. Journal of Bryology 31 (1): 50-54

Townsend, C. 2009. The genus *Ctenidiadelphus* M. Fleisch. (Hypnaceae) new to Sri Lanka, with typification of two specific names and a reduction to synonymy. Journal of Bryology 30 (3): 223-224

Townsend, C. 2009. *Campylopodiella dorothyae* sp. nov., a genus and species new to Africa. Journal of Bryology 31 (2): 127-129

Vilas B-B., Silvana B. 2009. *Hypnella symphyodontoides* (Bryophyta: Pilotrichaceae), a new species from Brazil. Journal of Bryology 31 (1): 20-22

Váňa J, Long DG. 2008. *Hamatostrepta* concinna gen. et sp. nov. (Jungermanniopsida, Lophoziaceae). a new Asiatic leafy liverwort from the Sino-Burmese border. Fieldiana Botany 47: 133–138.

Vaz-Imbassahy, T. de., Costa, D.P. da. 2008. **The Pilotrichaceae (Hookeriales) of Rio de Janeiro, Brazil.** Bryologist 111 (4): 551-575

Wilbraham, J. 2008. **Bryophyte Flora of Uganda. 8. Orthotrichaceae, Part 1. Macromitrioideae.** Journal of Bryology 30: 201–207

Wilbraham, J. 2008. **New synonymy and typification in African** *Schlotheimia* (Musci: **Orthotrichaceae**). Journal of Bryology 30: 196–200.

BBS-TBG Website Update

Recent additions to the TBG website comprise an expanded project page for the 'Bryophytes of the Mascarenes', including an introduction to this geographic region, an account of the 2008 meeting, a current checklist [to be updated soon] and a photo gallery.

The addition of a visitor statistics tool in May 2009 has provided interesting information on the user base of the website. During the last 4 months the website has had 218 visitors from 33 countries.



Location of visitors to the website (May-August 2009)

Visit the website at: www.nhm.ac.uk/hosted-sites/bbstbg

NOTICEBOARD

An opportunity to study tropical bryophytes at Nectandra Cloud Forest in Costa Rica, with Dan Norris

The Jepson Herbarium of the University of California, Berkeley has, for many years, offered a broad variety of weekend courses, most of which emphasize identification of plants and/or fungi (http://ucjeps.berkeley.edu/workshops). Recently, we have broadened our coverage to several longer duration courses in areas distant from California (Hawaii and New Zealand). We are now considering a course in tropical bryology to be offered on the Nectandra Cloud Forest near San Ramon in Alajuela Province, Costa Rica (see:

http://www.nectandra.org/index.htm). If adequate enrolment (about 15) is achieved, the course will be taught by Dr. Dan Norris of the University Herbarium, UC Berkeley, possibly in cooperation with a Costa Rican bryologist.

Evelyne and David Lennette, originally from Berkeley, California, developed the Nectandra Institute to host conservation oriented groups. The Forest includes a meeting centre and a laboratory in an otherwise pristine forest of about a square mile. It is bounded on three sides by grazing land but it abuts on one side with large tracts of pristine forest. Excellent accommodation both for food and sleeping arrangements are planned. During this course, we plan to walk on and near the about 5 miles of excellent and easy trails on the Nectandra forest, and we plan trips, with collecting possibilities, to high elevation lands within only a few hours drive. There is an excellent catalogue of the

biota of the forest with special coverage of ferns and vascular plants.

Participants in the course will work with completed keys written by Norris for the liverworts, hornworts and mosses that he has documented for the Nectandra Cloud Forests. Field collecting trips will take us to all parts of the Nectandra Forest. We anticipate that participants will be able to send materials collected during the course to home herbaria. The goal of the course is to prepare participants to do field recognition of the major genera of mosses, liverworts and hornworts of the Costa Rican cloud forest. Skills in laboratory identification to species are also predicted.

We are surveying the bryological community to determine whether there is adequate interest in such a course. We see two possibilities in terms of times to offer this course in 2010. We would like to plan for a time in March or April because of a pattern of lower rainfall. In the summer, more people will be free but, during that time, heavy rainfall will enforce morning trips followed by afternoon laboratory work. All seasons have pleasant temperatures that range primarily in the 60's to 70's F. Because a trip to distant Costa Rica should be of sufficient duration to allow serious learning, we would schedule 11 days for the course with 2 free days inserted so that each 3 planned days of study are followed by a free day. The price of the class will be about \$1500 (course, lodging and meals) plus air fare. To register interest: inform Cecile Shohet at cshohet@berkeley.edu, indicating 2010 spring or summer preference.

Contributions to TBG newsletters

The TBG newsletter relies on contributions from members, especially for the section 'news of members', and for information on bryological research activities, information on publications and for any features included. Digital photographs accompanying articles are also very welcome.

Please send your contributions for future TBG newsletters, at any time, to the coordinator (details below).

TBG coordinator: **Joanna Wilbraham**Botany department, Natural History Museum, Cromwell Road, London SW7 5BD. **Email: j.wilbraham@nhm.ac.uk**

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BRITISH BRYOLOGICAL SOCIETY

TROPICAL BRYOLOGY GROUP NEWSLETTER

Edited by Joanna Wilbraham

No. 25 October 2010

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A plea for collaboration rather than piracy

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- Bryophyte illustrations by Tracey Nowell
- New contact details for Robbert Gradstein

TBG MEETINGS

British Bryological Society - Tropical Bryology Group AGM 11 September 2010 Natural History Museum, London

Present: Jeff Duckett, Len Ellis, David Holyoak, Aline Horwath, Liz Kungu, Silvia Pressel, Brian O'Shea, Ray Tangney, Jo Wilbraham Apologies: Howard Matcham

1) **TBG committee** - The BBS website currently lists an 'Executive Committee' for TBG and the BBS secretary has asked if this can be updated. ACTION: An updated list to be sent to BBS secretary. A committee group is a convenient way to discuss issues arising as and when via email and it may be an idea to make more use of this to improve communication.

2) Mascarene Islands Project

a) Herman Stieperaere has briefly discussed with JW the unpublished documents and illustrations of Theo Arts which relate to his planned flora of Réunion. These documents currently reside at Meise (BR). ACTION: Jo to get in touch with Herman about what exactly is included here which would be relevant to a future moss flora work.

b) Future project work –some consideration was previously made to continuing the Mascarenes project with a similar workshop on Mauritius. Some tentative initial investigations into this have been made by Claudine Ah-Peng. ACTION: Jo to get back in touch with Claudine & co about this; potential funding sources need to be elucidated; a small working group to be set up to carry this forward more effectively.

TBG news25 - October 2010

- 3) Publishing news and activities of TBG Suggestions: 1) to produce an annual summary of TBG news/activities aimed at the Field Bryology 'news and society business' section? ACTION: JW to contact Ian Atherton to discuss possibility of this. 2) Produce a 'news from the TBG' column for IAB's Bryological Times?
- 4) Update documentation on current location of all collections from TBG expeditions to Uganda and Malawi There is still some uncertainty on the whereabouts of all collections from Uganda & Malawi expeditions of the 1990's. ACTION: 1) Brian to locate most
- current list of collections distribution and content. 2) Jo to contact Reading University as to whether any collections still remain here.
- 5) Update on all open TBG projects: MALOU project, work on Malawi collections and the Generic Guide to African Bryophytes. Some of these projects are very long running and the meeting group felt an update on where we are up to, and what can be done to fill in gaps if needed, would be useful. ACTION: Where are we up to with these Families not yet worked on from Uganda & Malawi expeditions to be highlighted. Jo and Brian to follow up with relevant persons.

TBG PROJECT UPDATES

Bryophytes of the Mascarenes

It is now two years since the taxonomic workshop and field meeting was held on La Réunion in September 2008. Since that time collections have been worked on and sets of specimens sent to Réunion University herbarium. A joint paper by the participants is currently in press with *Journal of Bryology* reporting on 34 new taxa records for the island. The additional data now available on the distribution of Réunion

bryophytes has allowed work to be done to highlight species and areas in most need of conservation attention. A provisional red data style assessment of the liverworts is currently *in press* and a similar effort for the mosses is being worked up at the moment. For more information about the project see the TBG website.

Jo Wilbraham, Natural History Museum, Cromwell Road, London, UK

NEWS OF MEMBERS

Fissidentaceae of Réunion

This revision of the Fissidentaceae of the Mascarene Islands of La Réunion, Mauritius and Rodriguez was published earlier this year by Ida Bruggeman-Nannenga and Theo Arts †. It comprises keys, descriptions and illustrations of the 35 species known from this region. Eighteen species are reported as new to La Réunion.

M. A. Bruggeman-Nannenga, T. Arts. 2010. A revision of the Fissidentaceae (Musci) of La Réunion (including all species known from Mauritius and Rodriguez). *Journal of Bryology* 32: 170–207

Ida Bruggeman-Nannenga, The Netherlands

Tropical typifications

Species Muscorum Frondosorum by J. Hedwig was published posthumously in 1801 and

embodies the official starting-point for moss nomenclature. It fell to C.F. Schwägrichen, the author's student, to edit and publish the work, and over subsequent years he also produced a series of supplementary volumes. Many novel moss species were described in Species Muscorum Frondosorum and its supplements, but with the passing of two centuries, the associations between these species and the specimens upon which their descriptions were based (type specimens) have often become obscure. The present rules of nomenclature require that taxa should be precisely typified, and most of the original collections of these particular species are conserved in the Hedwig-Schwägrichen Herbarium held by the Conservatoire et Jardin Botaniques, Geneva (G).

In April and June of 2010, funded by G, and generously hosted by the herbarium's curator, Dr Michelle Price, I was allowed to examine and typify original material of species described by Schwägrichen in the tropical moss genera *Calymperes* and *Syrrhopodon* (family

Calymperaceae). The results of my research, to be published in due course, will hopefully lend stability to the nomenclature of these taxa.

Len Ellis, The Natural History Museum, Cromwell Road, London, UK

News on bryology in Latin America

Robbert Gradstein attended the 10th Latinamerican Botanical Congress in La Serena, Chile (4-9 October 2010), and presented a keynote lecture about the "Impact of deforestation and climate change on tropical bryophytes". He also participated in the 8th symposium of the Latinamerican Bryological Society (SLB), which took place during the same congress. The programme of the symposium included 32 poster presentations from students from all over South America, including Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Peru and Venezuela, and from the West Indies (Dominican Republic, Puerto Rico). Lecture presentations were given by Yelitza **León** (Venezuela) on the ecology of bogs in the Venezuelan Andes; Denise Pinheiro da Costa (Brazil) on conservation of bryophytes in Brazil; Juan Larraín (Chile) on molecular phylogeny of Chilean mosses; Yelitza León on epiphyte diversity in an Amazonian and Andean forest of Venezuela; Angel Benitez (Ecuador) and **Robbert Gradstein** on new additions to the bryophyte flora of Ecuador; Ines Sastre-De **Jesús** (Puerto Rico) on the *methodology of* bryophyte inventory in a tropical cloud forest of the Dominican Republic; and Javier Martínez-Abaigar & Encarmen Núñez-Olivera (Spain) on the *impact of global change and ultraviolet* radiation on bryophytes.

A one-day bryological excursion went to famous Fray Jorge National Park, a relict temperate cloud forest at ca. 500 m along the Pacific coast of Chile south of La Serena. The weather was beautifully sunny and the participants enjoyed spectacular views of the snow-covered Andean cordillera, the ocean, the semi-desert vegetation, and the lush bryophyte vegetation of the remnant cloud forest of Fray Jorge, with abundant presence of pendent moss species, thick mats of various leafy liverworts and tiny epiphyllous species occurring on the leathery leaves of evergreen trees.

The 2-day bryological symposium, which was very well attended, was a great success and showed that bryology is thriving and well in

tropical America. A new executive council was elected for the Latinamerican Bryological Society, with Dr. Jaime Uribe (Colombia) as the new president. It was also decided that the homepage and the newsletter (*Briolatina*) of the society, which have been offline for the last two years, will be reinstated. For further information on the society write to Jaime Uribe, juribem@bt.unal.edu.col

New publications from Robbert Gradstein

- Désamoré, A., Vanderpoorten, A., Laenen, B., Gradstein, S.R. & Kok, P. 2010. Biogeography of the "Lost World" (Pantepui area, South America): insights from bryophytes. Phytotaxa 9.
- Gradstein, S.R. & Culmsee, H. 2010. Bryophyte diversity on tree trunks in montane forests of Central Sulawesi. Tropical Bryology 31: 95-105.
- Gradstein, S.R. (in press). A Guide to the Liverworts and Hornworts of Java. Biotrop scientific publications, Bogor, Indonesia. Contains keys and illustrations for the identification of about 450 species recorded from Java, Indonesia. A supplementary volume to the just-published checklist of Java by Söderström et al. (2010). To appear in 2011.
- Gradstein, S.R. & Ilkiu-Borges, A.-L. 2009. Guide to the Plants of Central French Guiana. Part IV. Liverworts and Hornworts. Memoirs of the New York Botanical Garden 76, 4: 1-140, 83 plates. A full-fledged Flora with keys, descriptions and full-page illustrations for about 175 liverwort species from northern South America.
- Gradstein, S.R. & Sporn, S.G. (in press).

 Diversity of epiphytic bryophytes along land use gradients in the Tropics. In: Nova Hedwigia Beiheft 139 (to appear November 2010). A brief synthesis of ten years of research on this subject in tropical America and Indonesia.
- Jácome, J., Kessler, M, Bach, K. & Gradstein,
 S.R. & Kessler, M. (in press). Responses of epiphytic bryophyte communities to simulated climate change in the Tropics. In:
 Z. Tuba, N. Slack & L. Stark (eds.),
 Bryophyte Ecology and Climate Change.
 Cambridge University Press (to appear November 2010).
- Mandl, N., Kessler, M. & Gradstein, S. R. 2009. Effects of environmental heterogeneity on species diversity and composition of

terrestrial bryophyte assemblages in tropical montane forests of southern Ecuador. Plant Ecology & Diversity 3: 313-321.

Mandl, N., Lehnert, M., Kessler, M. & Gradstein, S. R. 2010. A comparison of alpha and beta diversity patterns of ferns. bryophytes and lichens in tropical montane forests of southern Ecuador. Biodiversity & Conservation 19: 2359-2369.

Mota de Oliveira, S., ter Steege, H., Cornelissen, J.H.C. & Gradstein, S.R. 2009. Epiphytic bryophyte communities in the Guianas are niche assembled. Journal of Biogeography 36: 2076-2084. *Shows that contrary to the* seed-plants, dispersal limitation does not play an important role in the distribution and ecology of bryophytes in tropical rain

Söderström, L., Gradstein, S.R. & Hagborg, A. 2010. A checklist of the hornworts and liverworts of Java. Phytotaxa 9.

Sporn, S.G. Bos, M.M., Keßler, M. & Gradstein, S.R. 2010. Vertical distribution of epiphytic bryophytes in an Indonesian rainforest. Biodiversity & Conservation 19: 745-760.

Sporn, S.G., Bos, M.M., Hoffstätter-Müncheberg, M., Kessler, M. & Gradstein, S.R. 2009. Microclimate determines community composition but not richness of epiphytic understory bryophytes of rainforest and cacao agroforest in Indonesia. Functional Plant Biology 36: 171-179.

Robbert Gradstein, Muséum National d'Histoire Naturelle, Paris, France

Phylogeography of Sanionia uncinata

A recent paper by Lars Hedenäs reports on results of a molecular study into the phylogeography and origin of European Sanionia uncinata (Amblystegiaceae). This paper discusses possible origins of high elevation tropical African populations of this species.

Hedenäs, L. 2010. Phylogeography and origin of European Sanionia uncinata (Amblystegiaceae, Bryophyta). Systematics and Biodiversity, 8: (2) 177 - 191

Lars Hedenäs, Swedish Museum of Natural History, Stockholm, Sweden

Liverworts of Ethiopia

The bryophyte flora of Ethiopia remains among the least studied of all Africa countries though Ethiopia is clearly much more diverse for bryophytes than is conveyed by the previous checklists. In this paper, 89 species of liverworts are reported from an area of highlands in SW Ethiopia. Of these, 51 species are newly recorded for Ethiopia.

Hylander, K., Pócs, T. & Nemomissa, S. 2010. Liverworts of Southwestern Ethiopian montane forests: ecological and biogeographical notes. Journal of Bryology 32: 92-100.

Kristoffer Hylander, Stockholm University, Stockholm, Sweden

Bryophytes of Singapore and their possible roles in waste water remediation

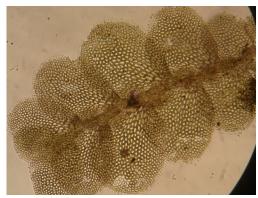
My current group is looking at moss as bioremediation agents for cleaning urban waters. This is important for Singapore as we have a significant interest to re-cycle waste waters as potable waters. One major project currently in operation is the containment of run-off waters into an area known as Marina Barrage. A river estuary is being dammed up to provide a reservoir for water activities as well as containment of flood waters during heavy tidal inflows. A second Botanic Gardens is planned beside the dam where part of the collected waters will be re-cycled through artifical marshes and lakes to bioremediate the waters. One idea is the creation of moss gardens as a possible partner in the bioremediation process and as a pleasing addition to the gardens.

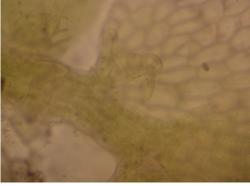
I am in the process of isolating local mosses, identifying them and looking at their potential as bioremediating agents in the near future. There is no moss interest group locally in Singapore and the research environment is mainly targetted at biomedical research. We do have Prof Benito Tan, who is the curator at the Botanic Gardens. and also an eminent bryology expert in Asia. I would be most happy to interact with other tropical bryologists who are pursuing similar research interests in bryophytes.

Gordon Lim, Ngee Ann Polytechnic, 535 Clementi Road, Singapore 599489

Cololejeunea jonesii reported from Kenya

Itambo Malombe and colleagues report on the first record of *Cololejeunea jonesii* in Kenya (Ngangao hill) having been hirtheto known only from the type locality of the Ulunguru's in Tanzania where it was last collected in 1975. This revised distribution therefore enhances the hypothesis that the biodiversity hotspot of the Eastern Arc mountains does indeed extend to the Taita Hills in South Eastern Kenya. These data are part of an ongoing research on epiphyllous bryophytes in Taita Hills.





Itambo Malombe, National Museums of Kenya, Nairobi, Kenya

A new species of *Fissidens* from Ecuador

Pursell, R. A. & D. H. Norris. 2010. *Fissidens minutifrons* (Fissidentaceae), a new rheophilous species from Ecuador. Bryologist 113: 129-131.

I am currently working on a revision of the Erpodiaceae and hope to have the manuscript ready for publication by the end of this year.

Ronald A. Pursell, The Pennsylvania State University, U.S.A.

Systematics of the Orthotrichaceae in sub-Saharan Africa

Earlier this year I published a taxonomic update on the *Macromitrium* of Réunion Island and surrounding region. This included a number of new synonyms for the genus which has helped towards a more accurate picture of the diversity and distribution patterns of *Macromitrium*. I am currently working on resolving the taxonomy of *Schlotheimia* from Réunion, with the aim to produce a floristic account of the Orthotrichaceae for the Mascarenes.

I have recently embarked on a joint project with Silvia Pressel investigating phylogeny of *Macromitrium* in the Indian Ocean Islands, which we hope will provide some illuminating insights into the evolutionary relationships of this group. In other news, Howard Matcham and I report on an interesting disjunctive distribution with *Zygodon oeneus* found new to Africa (Uganda) having been previously known from Bolivia.

Wilbraham, J., Ellis, L. 2010. Further taxonomic studies on the families Calymperaceae (Musci) and Orthotrichaceae (Musci) in the bryoflora of Réunion Island, with notes on taxa from other islands in the western Indian Ocean. *Cryptogamie, Bryologie* 31(1): 31-66.

Wilbraham, J.; Matcham, H. 2010. *Zygodon oeneus* Herzog (Bryophyta: Orthotrichaceae) new to Africa and Uganda. *Journal of Bryology* 32: 236-239

Jo Wilbraham, Natural History Museum, Cromwell Road, London, UK

LETTERS TO THE EDITOR

Request for collaboration rather than piracy

We recently received this letter which raises some serious issues of how scientists approach work in overseas countries.

"We wish to bring to your attention a matter that has affected at least three island nations of the Indian Ocean. The Mascarenes, Comoros and Seychelles form, with Madagascar, a hot spot of biodiversity. Our islands have relatively small populations and those of us who are still developing nations tend to have limited expertise in certain scientific fields, for example botanical taxonomy. We therefore welcome collaboration with overseas universities and research institutions, and particularly value cooperation with visiting specialists who can assist with taxonomic identification, training, advice, etc.

It is therefore with some regret that we report on unethical behaviour of some visiting scientists to one or more of our islands, who over the past few years have visited, collected specimens even within protected areas without due authorisation and sometimes failed to contact the authorities or work alongside our local botanists, some of whom may not be specialists but who know where information is lacking and therefore

welcome cooperation with specialists. In addition, duplicate specimens have not been deposited in our national herbaria and subsequently published papers and books have not been brought to our attention by the visiting botanists, nor have copies been provided for our national institutions. This behaviour is totally disrespectful of the local authorities and population, and goes against the ethic of being a field biologist.

In Seychelles at least, suitable legislation regarding the collection and export of genetic material is still in preparation, but all of our states have national protocols and procedures which are neither complex nor lengthy unless there are serious issues with the research. I therefore wish to reiterate that we welcome and encourage mutually beneficial collaboration with visiting scientists, some of whom have developed long-lasting and beneficial relationships with their institutions, and I trust that such negative behaviour is not widespread. I hope that future visiting botanists will cooperate with local scientists and authorities, rather than exploit our national flora for their own benefit.

Concerned biologist, Katy Beaver, Seychelles "

NOTICEBOARD

Bryophyte Illustrations

Do you need publication quality illustrations of bryophytes?

I am a trained botanist, very familiar with bryological material, and have experience of illustrating for publication. Send me slides of leaves, sections, material for habit sketches, and I can produce a beautiful and accurate plate for your publication at a very reasonable rate.

Contact: Tracey at t.nowell@sanbi.org.za

(Left: An example plate of *Hypodontium* sp.)



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New contact details for Robbert Gradstein

Robbert Gradstein has left Germany following his retirement from the University of Göttingen, and has moved to Paris where he has taken an office at the Museum of Natural History, as an honorary research associate. His new address is:

Muséum National d'Histoire Naturelle, Systématique et Evolution, UMS 7205, Case Postale 39, 57 rue Cuvier, 75231 Paris cedex 05, FRANCE.

Tel.: +33-01-4079-3178 gradstein@mnhn.fr; sgradst@gwdg.de

Contributions to TBG newsletters

The TBG newsletter relies on contributions from members, especially for the section 'news of members', and for information on bryological research activities, information on publications and for any features included. Digital photographs accompanying articles are also very welcome.

Please send your contributions for future TBG newsletters, at any time, to the coordinator (details below).

TBG coordinator: **Joanna Wilbraham**Botany department, Natural History Museum, Cromwell Road, London SW7 5BD. **Email:** j.wilbraham@nhm.ac.uk

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