

the Bryological Times



Newsletter of
the International
Association of Bryologists

Volume 97

December 1998

ISSN 0253-4738

Contents

PEET Mossing in Southeast Asia: Collaborative Fieldwork in Malaysia and Singapore	1
News, information and comments from Latin America	3
Regional editor: Inés Sastre-D J	3
Annual Meeting, American Bryological and Lichenological Society	4
Bryology at the International Botanical Congress in St Louis 1998	4
Best Book Buy	5
Keywords = Nonsense?	6
Obituary	6
News from the Swedish Museum of Natural History	7
Best Book Buy	7
DIARY	8

PEET Mossing in Southeast Asia: Collaborative Fieldwork in Malaysia and Singapore

by Brent Mishler, Haji Mohamed, and Benito Tan

Considerable fieldwork has taken place in tropical Southeast Asia in recent years. We report below the trials and tribulations encountered during the most recent bryological expeditions to the region organized by our three universities (University of Malaya, National University of Singapore, and University of California, Berkeley), funded in part by the U.S. National Science Foundation. This NSF grant was awarded to the University of California, Berkeley under the PEET program (Partnerships for Enhancing Expertise in Taxonomy) to study the systematics of the moss family Calymperaceae — see website at <<http://ucjeps.berkeley.edu/bryolab/PEET/index.html>>.

Our story begins with a visit to Pulau Tioman, a beautiful tropical isle off the east coast of Peninsular Malaysia. In a risky move on Oct. 31st, 1998, right at the end of the tourist season with the monsoon rains threatening to begin any minute and the hotels and restau-

rants closing their doors (literally in our faces), a group of four hardy bryologists (Ben Tan, Brent Mishler, Leslie Harrison and Meng-Shen Choy) took the rough boat ride out for a four-day, three night stay on the island (half deserted at this time of the year).

Over the last two years Tioman Island has been the subject of a floristic study by Ben Tan and Haji Mohamed. It was of interest to our PEET project because of the large number of species of Calymperaceae (and the related family Leucobryaceae) known to occur there. Our plan was to collect fresh material of these two families for molecular, microscopic, and culture studies, and to add to the floristic knowledge of the island by visiting previously uncollected localities.

The latter effort is to ensure a complete floristic survey of the island's moss flora, because we have a second goal in mind. We want to attempt a biogeographic comparison between it

and a remote oceanic island of similar size and elevation, Moorea (Society Islands, French Polynesia). The latter island is the site of a field station belonging to UC Berkeley (the Richard P. Gump South Pacific Biological Research Station) and has itself been the subject of intensive floristic investigation, beginning with Whittier and De Sloover, and currently by Brent Mishler and Dennis Wall. We hope that by comparing the biological features of the moss floras in a remote oceanic island with that of similar islands found in a continental "source" area such as Tioman, we can gain insights into biogeographic, ecological, and evolutionary processes.

On Tioman, we visited several localities, including a very rich water-

Contribution from
Ben Tan
Regional Editor

Continued on page 2

Continued from page 1
fall near Mukut at the southern tip of the island, and hiked up and over the central ridge of the island in order to observe an elevational gradient of moss distribution. By the end of the trip, we had added more than 10 species to the current manuscript listing Tioman mosses (prepared by Tan and Mohamed). In particular, our finds doubled the number of species of Calymperaceae reported from the island. The night before we left, some of the island resorts were feasting the local residents and tourists with free food and drink in "celebration" of the closing down of the lodging places because of the expected arrival of monsoonal rains. The food was good, and the rains fortunately held off while we were on the island, but they descended with a vengeance just as we were leaving the island on what might have been the last boat-load of homeward bound tourists for the season!

The next stop was Singapore, under the joint sponsorship of the UC Berkeley PEET grant and the National University of Singapore. For purposes of collecting fresh material of Calymperaceae and Leucobryaceae, two of us (Ben Tan and Brent Mishler) visited several natural sites in Singapore. On many of these trips we were accompanied by Aino Juslén, a visiting student who was in town preparing a liverwort flora of Singapore for her graduate thesis at the University of Helsinki under the supervision of Dr. S. Piippo.

One exciting bryological field trip in Singapore was a boat ride to nearby Pulau Ubin, an island in the Strait of Johore between Singapore and Malaysia, where extensive mangroves and inland secondary forest still exist. On this trip we were accompanied by several students from the National University of Singapore and staff members from the Singapore Botanical Gardens. Highlights of the Pulau Ubin visit included the sighting of giant swimming monitor lizards, rising tides which flooded our trail out of the mangroves, and a large, puffed-up male turkey who felt he owned a stretch of the road and

forced us to run around him (he wouldn't have dared try doing that in the U.S. so close to Thanksgiving Day!). We were also excited to find extensive patches of the enigmatic hornwort *Notothylas* on low-lying soil. Indeed, the visit to Pulau Ubin was a very enjoyable and successful trip for both mosses and liverworts, as well as hornworts.

In Singapore, where high rises and business establishments have proliferated in recent years, a visit to Bukit Timah, a Nature Reserve containing primary forest right in the center of the city, is a must for every visiting botanist. While the forest here has never been cut (and contains hundreds of tree species in only 75 hectares), it is such a small patch that it has been subjected to drying effects of air movement and sunlight. Thus, the under-canopy of the forest contains fewer epiphytic bryophytes and lichens than one would expect.

The final major field expedition was to Mount Kinabalu on the island of Borneo, in the state of Sabah, Malaysia, undertaken by Brent Mishler and Haji Mohamed, accompanied by Berhman Ahmad, Mashitah Yusoff, Rimi Repin, and Johnny Gisil. Again the dual goal was to collect fresh material of Calymperaceae and Leucobryaceae, and to expand on the solid base of floristic knowledge already available for the mountain (summarized in the colored guidebook to bryophytes published by Frahm et al. in 1996).

Mt. Kinabalu Park is a veritable wonderland of biodiversity, home to the famous *Rafflesia* (the world's largest flower), fifteen species of the giant pitcher plant *Nepenthes*, and more than 4,000 other species of tracheophytes (estimates are that there are nearly 1,000 species of orchids alone!), and 1,000 species of bryophytes, with vegetation types ranging from lowland rainforest to alpine scrub. Unfortunately, the park today is an island in a sea of deforestation across Sabah State. It is thus somewhat depressing driving up the mountain road to reach the park

headquarters (not to mention dangerous given our driver's penchant for passing on blind curves!). But once there, the pristine vegetation, clear, cool air, rushing streams, and above all, the sublime views of the granite peaks looming above made the trip extremely rewarding and worthwhile. An extensive, well-maintained trail system allows access to all the vegetation zones on the mountain. A cable canopy walkway suspended up to 45 meters above the ground allows visitors to reach the forest canopy in the lowland rainforest at Poring Hot Springs. After sampling at a range of elevations, we came away convinced this is a wonderland for mosses and liverworts as well (with lots of gentle rain beginning precisely at noon each day!).

We hope to continue and expand the current enthusiastic spirit of cooperation among our three institutions, which are strategically positioned spanning the Pacific Rim. This rich mix of fieldwork, carried out jointly by local experts, visiting specialists, and students — focused both on floristics of an area as well as on intensive systematic studies of particular groups — is a very efficient way of utilizing resources, and also a good way for both professors and students to learn together about bryophyte systematics and ecology. At a time of limited resources, cooperative research ventures and multi-university training of students make especially good sense (and are a heck of a lot of fun, we must admit).

[As a side note, the facilities at the Park Headquarters are first rate, including accommodations and research buildings, with plush seminar rooms. We thus propose Kinabalu Park as an ideal site for a future IAB meeting, the first in Southeast Asia.]

Contribution from
Inés Sastre-
De Jesús
Regional Editor

News, information and comments from Latin America

Saludos from Puerto Rico! I did survive hurricane Georges, which crossed the island from East to West on September 21. The city of Mayagüez, where I live, was under the effect of the hurricane for 14 hours ... quite a long night.

NEWS - The VII Latin American Botanical Congress, held 18-24 October in Mexico City, was attended by over 1,500 botanists from 12 different organizations. At the meeting of the Latin American Bryological Society, members voted to continue holding a symposium within the congress. The Society also approved the addition of a workshop and a field trip for the next meeting, which will be held in Bogotá, Colombia in 2002. The following officers were elected: Olga Yano (Brazil), President; Angeles Cardenas (México), Treasurer; Efraín De Luna (México), Editor of *Briolatina*.

UP-COMING EVENTS - March 1999 - Dr. Efraín De Luna will host a workshop at the Instituto de Ecología in Xalapa, México. The objective of this workshop is to gather the bryologists involved in DNA sequence analysis of bryophytes to discuss the results

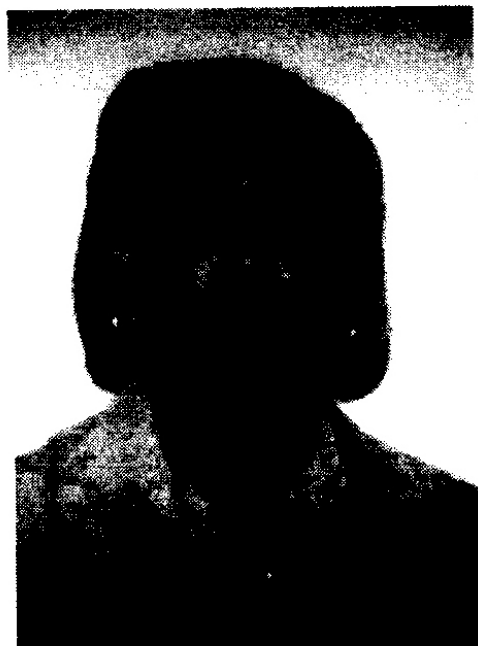
My interest in bryophytes developed in 1982, after accompanying Dr. W. Reese and Dr. W. R. Buck during their first visit to Puerto Rico. In 1983, I took a bryophyte summer course taught by Dr. H. Crum at the University of Michigan Biological Station. It was while on this course that I decided to pursue a career in bryology. I did my graduate work under the supervision of Dr. W. R. Buck at the New York Botanical Garden (NYBG) and City University of New York. During my tenure as a student at the NYBG, I participated in several collecting trips to Venezuela, Ecuador and Colombia.

After participating in the 1986 Latin American Botanical Congress, I became involved in the "Sociedad Latinoamericana de Briología (SLB)". From 1992-1998 I was president of the SLB, and during this time the society became one of the Latin American associations that regularly participates and promotes the Latin American Botanical Congress.

Presently, I am an associate professor at the Biology Department of the Mayagüez Campus, University of Puerto Rico. Since I joined this faculty in 1993, I have been in charge of the freshman biology course. In this course I re-structured the laboratory exercises by adding the current educational approaches of critical thinking and cooperative learning. In some semesters I teach two upper level courses: Tropical Bryology and Special Topics.

of their work, assemble data matrices and get prepared for the International Botanical Congress.

May 1999 - Dr. Inés Sastre-D J will host a workshop to train and encourage students of cryptogamic plants to do monographic studies. This workshop is sponsored by the Atlantea Project, a program of the University of Puerto



I have been working on local floristics, development of a herbarium for teaching and research purposes, and establishment of conservation priorities for Puerto Rico. In the last two years I have been very active in community work, helping a group of citizens to manage a new forest reserve in the island. We have developed interpretative trails in which bryophytes are given importance.

Address: Inés Sastre-D J, Biology Department, Mayagüez Campus, University of Puerto Rico, P O Box 9012, Mayagüez, PR 00681-9012. Tel: 787-832-4040 Ext. 3277. Fax: 787-834-2405.

Email: i_sastre@rumac.upr.clu.edu

Rico that promotes academic and research exchange of countries in the Caribbean Area. The invited lecturers are Dr. Efraín De Luna (México), Dr. Noris Salazar (Panamá) and Dr. Iván Valdespino (Panamá). Students from the Dominican Republic, Cuba and Puerto Rico were selected for this workshop. [ISJ]

Bryology at the International Botanical Congress in St Louis 1998

ATTENTION: "DEEP GREEN" STUDENT TRAVEL AWARDS TO IBC'99

The Green Plant Phylogeny Research Coordination Group (GPPRCG) was formed to facilitate interactions among research groups that have independent foci yet entail some aspect(s) of deep level phylogeny across the diversity of the "green" kingdom. An improved understanding of the phylogeny of green plants not only allows the intellectual satisfaction of discovering the "roots"

of this major component of the world's biotic diversity, but has important practical benefits as well. Through the auspices of a tri-agency grant (USDA/NSF/DOE) the GPPRCG has, since 1994, sponsored or co-sponsored two to three symposia or workshops per year in the area of empirical and theoretical phylogenetics.

To summarize the current state of

knowledge of deep level green plant phylogeny, and to make this information available to the botanical community, GPPRCG will sponsor a series of eight interlocking symposia at the XVI International Botanical Congress to be held in St. Louis, Missouri, 1-7 August, 1999. In order to increase participation by young investigators, the GPPRCG will award at least ten travel grants of up to \$500 each. Undergraduate, graduate and postdoctoral students (within 5 years of their Ph.D.) whose primary research focus is the study of DEEP LEVEL GREEN PLANT PHYLOGENETICS are eligible for these awards. To apply, applicants should send a short curriculum vitae (2-page limit), a one-page statement describing their research interests and experience in green plant phylogenetics, and a letter of recommendation from their primary advisor, in duplicate, to Dr. Elizabeth Zimmer, LMS, MSC, MRC534, Smithsonian Institution, Suitland, MD 20746 (Email: "zimmer@lms.si.edu"; FAX: 301-238-3059). Application deadline is FEBRUARY 1, 1999.

For more information on the GPPRCG (including minutes of the past meetings, as well as Data Availability Matrices for the major lineages of green plants), the IBC, and the green plant phylogeny symposia, refer to the following web sites:

GPPRCG Web Page: <http://ucjeps.berkeley.edu/bryolab/greenplantpage.html>

IBC Web Site: <http://www.ibc99.org>
Symposia information: <http://ucjeps.berkeley.edu/bryolab/GPphylo/events.html>

Annual Meeting, American Bryological and Lichenological Society

July 30 - August 1, 1999, Southern Illinois University, Carbondale, Carbondale, IL 62901-6509 USA

The American Bryological and Lichenological Society (ABLS) will hold its annual meeting and foray in southern Illinois, July 30-August 1, just prior to the XVI International Botanical Congress in St. Louis. The International Association for Lichenology (IAL), the International Association of Bryologists (IAB), and Moss 99 Conference are co-sponsors. The meeting and field trips are being organized by Barbara Crandall-Stotler (crandall@plant.siu.edu), Andrew Wood (wood@plant.siu.edu) and Bob Egan (egan@unomaha.edu). Field trips are planned for the Shawnee National Forest, Giant City State Park, and Crab Orchard National Wildlife Refuge. Student members are encouraged to attend and participate in oral paper presentations for the annual ABLS A. J. Sharp Award. Limited student travel grants will be available. Time has been set aside for general business meetings as needed.

Participants may stay in SIU dormitory housing or at local motels. Campgrounds are available within 15 miles of Carbondale. Participants will have ample time on Sunday afternoon, August 1, to travel to St. Louis for the opening of the XVI International Botanical Congress.

Registration fee will be US\$30.00 and will include meetings, programs, snacks, and Saturday evening dinner. Housing in the SIU dormitories will cost US\$17.15/night (double) or US\$21.70/night (single). Local motels range from US\$35.00/night to US\$109.00/night. The Saturday field trip to Shawnee National Forest will cost US\$20.00/person.

Registration forms for the meeting will be sent to ABLS members in January and posted on the ABLS web site <http://ucjeps.herb.berkeley.edu/bryolab/ABLS.html>

Feel free to contact the organizers for additional information.

Bob Egan
President-Elect, ABLS

Continued on page 5

Joint Meeting of ABLS, IAB, IAL and Moss 99 Conference

Southern Illinois University, Carbondale, Carbondale, IL 62901-6509

July 30 - August 1, 1999

Local organizers: Dr. Barbara Crandall-Stotler, Department of Plant, Biology, e-mail: crandall@plant.siu.edu
Dr. Andrew Wood, Department of Plant Biology, e-mail: wood@plant.siu.edu

PROGRAM OUTLINE:

Friday, July 30: 9:00 - 1:30 -

Registration and check-in, atrium of LSIII

1:30 - 3:30 - ABLS Sharp Award paper session I, LSIII auditorium

3:30 - 4:00 - Coffee/tea break

4:00 - 6:00 - ABLS Sharp Award paper session II, LSIII auditorium

6:30 - 8:30 - Social, Dunn-Richmond Center

Saturday, July 31: Two options are available, as outlined below:

Option I: 8:00 - 5:00 - Field trip to several natural areas of bryo-lichen diversity in Southern Illinois, including a bald cypress swamp, and representative canyon and bluff top habitats of the Shawnee National Forest

Option 2: 8:00 - 12:00 - Moss 99 Conference - Bryophytes as model organisms for the study of stress tolerance - a paper/discussion session organized by Andrew Wood, Mel Oliver and D. J. Cove

1:00 - 5:00 - Moss 99 Conference - Informal discussions

All participants: 6:00 - Dinner at the Lodge, Giant City State, Park, cash bar available before dinner

Sunday, August 1: 9:00 - 12:00 - Business meetings of ABLS, IAB, or IAL and/or field trips to Giant City State Park and natural areas within the Crab Orchard National Wildlife Refuge

12:00 - meeting adjourns for travel to St. Louis (Note: It is a 2 hour drive from Carbondale to St. Louis, where the IBC will convene on Sunday evening)

ACCOMMODATIONS

On campus accomodation is available in the small group housing dormitories of SIU. The rooms are of dorm quality with shared bath facilities, but with towels, soap and linens provided. The dorms are close to the meeting hall and convenient to all parts of the campus, including the campus lake. Rates are \$17.15/person for double occupancy and \$21.70 for single occupancy. Reservations must be made at the time of pre-registration, through the meeting organizers.

In addition, Carbondale has numerous motels within a short drive of campus. A few examples, with rates, are provided below. Reservations should be made directly with the motel of choice.

Best Inns of America, Rt. 13 & University Mall, 1345 E Main Street, Carbondale. Special SIU Rate Available (mention that you are attending the conference at SIU): \$34/one bed, \$41/two beds; continental breakfast included. Ph: 618-529-4801, or 1-800-237-8466.

Super 8 Motel, 1180 E Main Street, Carbondale. Rates: \$51/one bed, \$53/

two beds; breakfast included. Ph: 618-457-8822, or 1-800-800-8000.

Holiday Inn, 800 E Main Street, Carbondale. Rates: \$69 - \$75. Ph: 529-1100

Ramada Limited, Rt. 13 and Giant City Rd, 800 N. Giant City Rd. Rates: \$69 - \$109; breakfast included. Ph: 618-351-6611, or 1-800-272-6232.

A number of campgrounds can be found within a 15 mile radius of the city of Carbondale. Information on these facilities can be obtained from the offices of the Crab Orchard National Wildlife Refuge, RR 3, Carterville, IL 62918. Ph: 618-997-3344.

COSTS

Registration Fee for all Participants: \$30.00

This fee provides for the following activities: participation in all paper sessions, meeting documents, coffee/tea breaks, Friday night social (drinks included), Saturday night dinner (drinks not included).

Field Trip Fee, required for Saturday field trip: \$20.00

The field trip fee is required for all participants choosing option I on Saturday. It provides for field trip transportation and a box lunch.

Continued from page 4

Brent D. Mishler, University and Jepson Herbaria, Department of Integrative Biology, University of California, Berkeley, 1001 Valley Life Science Bldg #2465, Berkeley, CA 94720-2465 USA. Phone: (510) 642-6810. FAX: (510) 643-5390. E-mail: bmishler@socrates.berkeley.edu. WWW: <http://ucjeps.berkeley.edu/people/mishler.html>

Best Book Buy

Jan-Peter Frahm recently brought to my attention the availability of the following book. Wilf Schofield furnished the details.

Here is a publication free for the asking.

Working paper 12/1996. Bryophytes of British Columbia: Rare Species and Priorities for Inventory.

Copies are available from B. C. Ministry of Forests, Forestry Division Services Branch, Production Resources, 333 Que-

bec Street, Victoria, B.C. V8W 3E7 Canada. They cite it as follows: Ryan, M. W. Bryophytes of British Columbia: rare species and priorities for inventory. Res. Br., B.C. Min. For., and Wildl. Br., Min. Environ., Lands and Parks, Victoria, B.C. Work. Pap. 12/1996. - Dale H. Vitt

Literature Column

Johannes Enroth

Keywords = Nonsense?

More and more journals include keywords in their abstracts. Apparently this looks modern and progressive, and among bryological journals, the *Journal of Bryology*, *Cryptogamie* and *Nova Hedwigia* give keywords. But, have you ever heard of a colleague who uses these keywords?

Keywords are an invention of the pre-computer age, and were already in use for punch cards at the end of the sixties. Their purpose is simple in principle, in allowing searches (today by computer) for references matching the keyword like the header in a group of filecards, but with the difference that one reference can be keyed out several times.

Sounds good.

But in practice? If you have ever used keywords in a computer, you know that the spelling of the keywords must be consistent. If you have ever made a typing error, you will never find the reference again; it's lost. Consistent spelling means also that keywords must be more or less the same. You may search for ecology, *ecolo** or *eco** with the same success, but for a new species you may not use "new species" the first time and "new taxon" the next. It means also that the keywords must be in one and always the same language. Usually the keywords are in the language of the article. If it is in German, it reads *Ökologie*, while in a Scandinavian language this will probably be something like *Oecologi*. The language variations in phytogeography, *Fitogeografie*, and other terms are similar. And what if one article gives the keyword in English and the next in French?

The best way is for the computer user to devise their own set of keywords. In this case a thesaurus of keywords, which may be hardcopied for convenience, is advisable so that the same categories are always used with the same spelling. But what is the purpose of the keywords given by the authors? First of all all keywords which appear in the title are superfluous. One can as easily search for strings in the title as in the

field for keywords. Therefore many publications with titles like "Revision of the genus X, new records for the country Y, the genus X in Y, species X found new to Y" need no keywords. The same concerns keywords such as cladistics or molecular systematics if the terms are (as is usually the case) in the title. What about the other keywords? A look through one volume of the *Journal of Bryology* revealed keywords such as "new characters, spore counting, location effect, regeneration, R. Teme, flint stone, hazel coppice, chalk, alien species". Would you ever search for such a keyword? No? *Cryptogamie* gives keywords in one or more different languages (French, Spanish, English) for some articles, while some lack keywords, others have them only in English, in English and French, or in French and Spanish but not English. What do we do in this case? Then why are the journals giving keywords? The only solution would be for all

Alan possessed a profound and broad knowledge of bryophytes and the plant kingdom in general. He was a particularly knowledgeable and enthusiastic horticulturalist, and his advice was often sought. Always supportive and encouraging to friends and colleagues, his kindness, generosity and wisdom will be greatly missed.

Alan's funeral service will be held in the Church of the Ascension, Ealing on Wednesday 4th November at 12.15 (There will be family flowers only, donations in Alan's memory will be given to the McMillan nurses and the Hospice.)

*Len Ellis, Department of Botany,
The Natural History Museum,
Cromwell Road, London SW7 5BD,
Tel. 0171 938 8856*

field for keywords. Therefore many publications with titles like "Revision of the genus X, new records for the country Y, the genus X in Y, species X found new to Y" need no keywords. The same concerns keywords such as cladistics or molecular systematics if the terms are (as is usually the case) in the title. What about the other keywords? A look through one volume of the *Journal of Bryology* revealed keywords such as "new characters, spore counting, location effect, regeneration, R. Teme, flint stone, hazel coppice, chalk, alien species". Would you ever search for such a keyword? No? *Cryptogamie* gives keywords in one or more different languages (French, Spanish, English) for some articles, while some lack keywords, others have them only in English, in English and French, or in French and Spanish but not English. What do we do in this case? Then why are the journals giving keywords? The only solution would be for all

Orbitury

Alan Eddy

It is with great sadness I announce the death of Alan Eddy on 27th October 1998. He had courageously fought cancer for more than five years.

Alan possessed a profound and broad knowledge of bryophytes and the plant kingdom in general. He was a particularly knowledgeable and enthusiastic horticulturalist, and his advice was often sought. Always supportive and encouraging to friends and colleagues, his kindness, generosity and wisdom will be greatly missed.

Alan's funeral service will be held in the Church of the Ascension, Ealing on Wednesday 4th November at 12.15 (There will be family flowers only, donations in Alan's memory will be given to the McMillan nurses and the Hospice.)

*Len Ellis, Department of Botany,
The Natural History Museum,
Cromwell Road, London SW7 5BD,
Tel. 0171 938 8856*

Jette Lewinsky-Haapasaari

Dear Friend

Yesterday, 12.11.1998, was a beautiful short winter day of November in Kuopio, Central Finland. And it also was the day when Jette Lewinsky-Haapasaari - during her last weeks only Haapasaari - was to leave for her last trip.

Soon after the midday when sun was still shining on the slope of the pine forest hill, opposite to her window in the hospital, with a thin cover of white, new snow she died exhausted by the breast cancer against which she had fought so heroically since autumn 1990. In last August it had proceeded into her spinal cord and marvellous brains with the result that she was invalided perfectly. Even though she was confined to the bed for weeks with an ability to move slightly the head and arms only she was the same Jette we all loved close to the arrival of the sparing death.

When lying on the deathbed she often remembered her numerous friends all over the world with affection since as she said they were an essential part in making her life rich and profound.

Now it is our turn to honour her memory and how could we ever forget her bright smile.

Yours Matti Haapasaari

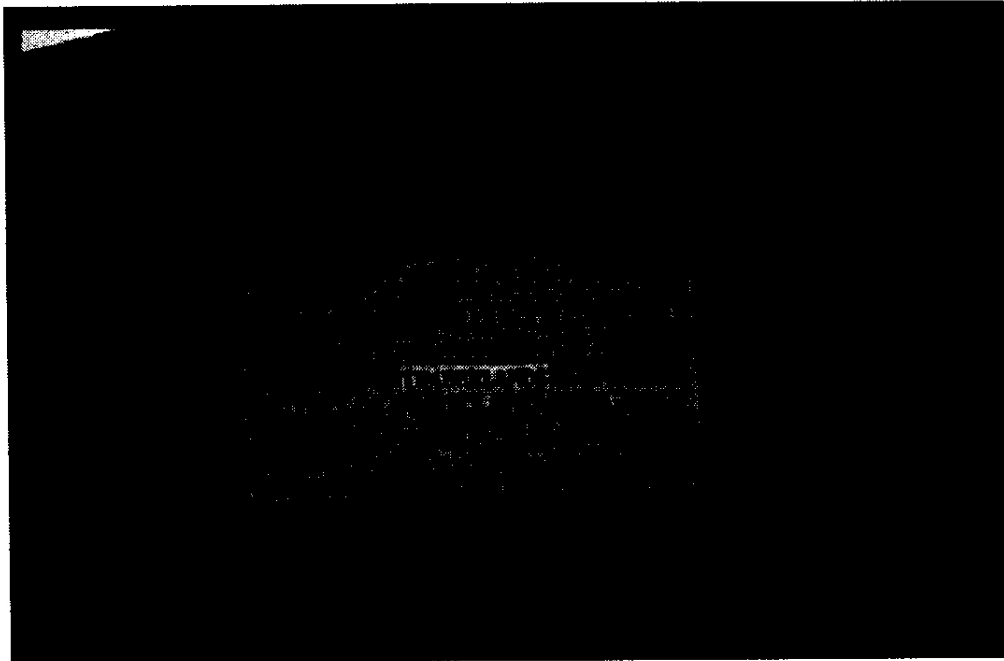
E-mail: matti.haapasaari@kuopio.fi

Fax: +358 17 182654

Address: Kuopio Natural History Museum, Myhkyrinkatu 22, FIN-70100 Kuopio, Finland

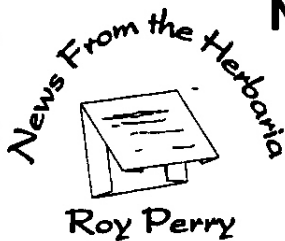
bryologists to use the same thesaurus of keywords in the same spelling and the same language and all authors would use the appropriate words from this list. Alternatively each individual would use his own keywords, as suggested above, in which case we would not need those in the journals.

Jan-Peter Frahm, Botanisches Institut, Meckenheimer Allee 170, D 53115 Bonn, frahm@uni-bonn.de.



Bryophytes commercialized. Photo J.-P. Frahm

News from the Swedish Museum of Natural History



The bryophyte herbarium at S is now registering all bryophyte names in the collections. This list of names reflects the present state at the herbarium, and represents a first step in the process of updating the nomenclature of the collections, and in improving the efficiency of curation. At present, the letters A-C, and S-Z have been checked for the mosses and are available on Internet at the address '<http://www.nrm.se/kbo/saml/mossor/welcome.html.en>' or through the web page of the Department of Cryptogamic Botany (<http://www.nrm.se/kbo/welcome.html.en>). At present these lists are far from finished, and material may well be placed under synonymous names in many cases. Information regarding such cases, or other

inconsistencies, will be most appreciated, in order to make the collections more easily available to researchers all over the world.

Another important on-going project at the bryophyte herbarium in S is the separation of type specimens from the rest of the collections. Again, we have started with the mosses, and have so far reached the letter P. In time, all types will be registered, a process that has now reached the genus *Blindia* (*Breutelina* and *Isothecium* types are also registered). In addition, scattered taxa were registered in connection with the handling of loans. Registered type collections, now almost 1,400, are available at the address '<http://www.nrm.se/kbo/saml/mosstyp.html.se>', or through the web page of the Department of Cryptogamic Botany.

Lars Hedenäs, Swedish Museum of Natural History, Dept. of Cryptogamic Botany, Box 50007, S-104 05 Stockholm, Sweden; e-mail: lars.hedenas@nrm.se

Best Book Buy



Johannes Enroth

The "Mosses of South Australia" by the late D.G. Catcheside is still available at a price of A\$ 1.95 (!!!) (US\$ 1.20), plus postage. Postage by airmail (e.g. to Germany) is A\$ 17.50, however, the price is even in total a bargain. Send orders to: Information SA, Subscription and Mail Order Service, P.O. Box 1, Rundle Mail, Adelaide SA 5000, Australia. Payment by credit card, cheque or money order.

Annette Lehnacker, Volker Buchbender, Botanisches Institut, Meckenheimer Allee 170, D 53115 Bonn, Germany.

Jan-Peter Frahm, Botanisches Institut der Universität, Meckenheimer Allee 170, D-53115 Bonn, Phone: 49-228-73-2121 fax - 3120

The *Bryological Times* is a newsletter published for the *International Association of Bryologists*. Items for publication are to be sent to the Editors or Regional Editors, except for those for the regular columns, which may go direct to the column editors

Editors

Lars Söderström, Dept of Botany, Norwegian University of Science & Technology, N-7055 Dragvoll, Norway. FAX +47 73596100. Email: Lars.Soderstrom@chembio.ntnu.no

Henrik Weibull, Dept Ecology & Environmental Science, Swedish Agricultural University, Box 7072, S-75007 Uppsala, Sweden. FAX +46 18673430. Email: Henrik.Weibull@emc.slu.se

Terry Hedderson, Dept of Botany, University of Reading, Whiteknights, RG6 2AS Reading, UK. FAX +44 1 734 753 676. Email: T.A.J.Hedderson@reading.ac.uk

Regional Editors

N. America: René J. Belland, Devonian Botanic Garden, Univ of Alberta, Edmonton, Alberta, Canada. T6G 2E1. e-mail: rbelland@gpu.srv.ualberta.ca

Latin America: Inés Sastre-De Jesús, Dept of Biology, Univ of Puerto Rico, P.O. Box 5000 Mayagüez, Puerto Rico 00681-5000. Email: I_sastre@rumac.upr.clu.edu

C & E Asia: Cao Tong, Inst of Applied Ecology, The Chinese Acad of Sci, P.O. Box 417, 110015 Shenyang, Liaoning, P.R. China. Fax: +86 24 23843313. Email: IFP@iae.syb.ac.cn

SE Asia: Ben Tan, Dept of Botany, School of Biological Sciences, National Univ of Singapore, Singapore 119260. Email: dbsbct@nus.edu.sg

Australia and Oceania: Ray Tangney, Dept of Botany, University of Otago, PO Box 56, Dunedin, New Zealand. Fax: +64 3 479 7583. Email: ray@phyton.otago.ac.nz

Column Editors

Literature column: Johannes Enroth, Department of Ecology and Systematics, P. O. Box 7, FIN-0014 University of Helsinki, Finland. Fax: +358 9 191 8656. Email: Enroth@kmus.helsinki.fi

Conservation column: Tomas Hallingbäck, Threatened Species Unit, Swedish Agricultural Univ, P.O. Box 7007, S-75007 Uppsala, Sweden. Fax: +46 18 673480. Email: Tomas.Hallingback@dha.slu.se

News from the Herbaria: A. Roy Perry, Dept of Botany, National Museum of Wales, Wales CF1 3MP, UK. Email: PerryR@cardiff.ac.uk

Tropical Bryology Column: Tamás Pócs, Eszterházy Teachers' College, Dept. of Botany, Eger, Pf. 43, H-3301 Hungary. e-mail: colura@gemini.ektf.hu

DIARY

1999

April 14-21. BBS Spring Field Meeting in Abergavenny, Gwent (provisional dates). Local secretary: Dr. Jonathan Sleath, The Villa, Kingstone, Herefordshire HR2 9ET, UK. Tel. +44 01981 251634.. Email: jonathan.sleath @virgin.net.

May 29-30. Hedwig Symposium, Göttingen, Germany. For information contact: S. Rob Gradstein, Institute of Plant Sciences, Untere Karspüle 2, 37073 Göttingen, Germany. Email : sysbot@gwdg.de

July 30-August 1. IAB/ABLS meeting in or near St. Louis. More information to follow.

August 1-7. XVI International Botanical Congress and IAB Biennial Meeting in St. Louis, Missouri, USA. Information to follow (see also this volume).

The Bryological Times, founded in 1980 by Stanley Wilson Greene (1928-1989), is distributed from Canberra (Australia), Edmonton (Canada), Eger (Hungary), Geneva (Switzerland), Hiroshima (Japan), Moscow (Russia), Praha (Czech Republic), Reading (U.K.), Shenyang (China), St. Louis (USA) and Trondheim (Norway).

Production

Lars Söderström, Trondheim

For details regarding membership of to *International Association of Bryologists* (currently US \$ 11.- per year) write to Dale H. Vitt, Department of Biological Sciences, University of Alberta, Edmonton, Alberta, Canada T6G 2E9. Email: svitt@gpu.ualberta.ca