

The Bryological Times
January 1981, Number 7
Table of Contents:

Editorial: Which Way Forward?	1
The Season's Greetings.....	1
Report of a Mini-Symposium on African Bryology in Poznań June 1980. T. Pócs.....	3
• Musci	3
• Hepaticae	4
• New Checklists in Progress	4
• References	4
A Meeting with Prof. Van Der Wijk, Groningen, 30 October. S.W. Greene	4
Bryology in Vancouver, July 1980. Dale H. Vitt and Diana G. Horton.....	5
Cultivation of Bryophytes. H. Inoue.....	6
Future Meetings: XIII International Botanical Congress, Sydney 21-28 August 1981, Section 8A Bryology... Latest (December) version of programme	7
As Advertised... field trip to Papua New Guinea. B.O. van Zanten	8
Day tour of Blue Mountains... G.A.M. Scott.....	9
Diary	9
Constitution Committee Prepares to Start Work. G. Mogensen.....	10
Desiderata: Revising New Zealand species of <i>Macromitrium</i> ... Dale H. Vitt	10
Personalia:	
• G.K. Berrie	10
• R.D. Seppelt.....	10
• Benito C. Tan.....	10
Field Trip: Visit to Iceland. P.N. Hooper	10
Recent Publications:	
• J. Landwehr; S.R. Gradstein and H. van Melick	10
• O. Na-Thanang	10
• R.M. Schuster	10
Items for the Next Issue: Editor S.W. Greene	10

EDITORIAL

Which way forward?

THE START OF A NEW YEAR, in which the International Association of Bryologists will hold a series of symposia and a Business Meeting at the XIIIth International Botanical Congress in Sydney, as well as elect new officers and Councillors to run the Association, seems to be an appropriate time to stand back and consider the objectives and the achievements of our Association. Such reflections are also timely as a Committee is examining what changes, if any, are necessary in its Constitution.

What then is IAB and what has it achieved in its 11 years of life?

Founded in Seattle in 1969 at the XIth International Botanical Congress, with an initial membership of ca. 100, it now has over 350 members representing 42 countries. The 2nd edition of the Directory of bryologists and bryological research, issued in 1979, lists about 800 bryologists. Thus almost 50% of the listed world population of bryologists are members. And the news from the Secretariat in Utrecht is that the slope of the membership graph continues to point upwards. We may thus fairly claim to represent within the membership a substantial body of world bryological opinion.

But for reasons beyond our control there is a degree of bias since colleagues living under certain political regimes are debarred from membership by financial constraints. There is also a suspicion that the membership is balanced in favour of taxonomists, as was argued in these columns last year in an article entitled "IAB or IABT?" In the same issue (No. 4), our Honorary Secretary gave a spirited reply which many would endorse. But

the strength of the suspicion may be judged from the announcement in the last issue (No. 6) that the mutually advantageous IAB/IAPT link is a cardinal question to be considered by the Constitution Committee. So far, no one seems to have produced an analysis of members' interests based on the data in the Directory - it would surely be a pointer?

When considering the activities of IAB it should be borne in mind that certain principles have guided what has and has not been done. It was realized at the outset that if IAB were to play a worthwhile and effective role, its relationship to the existing bryological societies would

The Season's Greetings

The Editor would like to take this opportunity of thanking all who have contributed articles, comment and support, to The Bryological Times and to wish them, and all the readership, a happy, prosperous and 'bryo-filled' New Year.

have to be considered carefully. Indeed the nature of this relationship could be said to have determined much of the Association's activities. A cardinal principle has been, and still is, that IAB would not seek to duplicate the activities of the National Societies.

What is their essence? These Societies are national or regional organisations with a mixed amateur and professional membership devoted to the study of their patrial bryophytes. But they issue international journals and enjoy an international membership. Judging from their size and vigour and the quality of their journals this 'mix' seems to be an excellent recipe for success.

However, few of these Societies in the 60's - and it remained so during the 70's - sponsored international meetings, although at their paper-reading sessions, members discoursed on their studies of plants from far and wide. No Society it seemed wished to assume the role of sponsoring meetings at International Botanical Congresses or similar prestigious assemblies, and none of them sought to advocate the needs of bryology in the world at

large. It was thoughts like these that helped to convince the members of the original Organizing Committee that there was a role for an IAB which could complement the activities of the National Societies. To judge from the high level of support at the number of international meetings it has held, as well as the number of publications it has sponsored, IAB can fairly claim to have been successful in this respect. It leads to the conclusion that the basis on which a successful co-existence has been built over the last 10 years can also be successful for the next decade.

Where IAB has been less successful is in identifying the major issues facing bryology at the present time and developing a strong advocacy to get something done. Tentative steps were taken during the 1979 Geneva Workshop where a number of resolutions were passed (Bull. Bryol. XVII, Taxon 29 (2/3): 370-371, 1980) but how many believe that these will have any influence outside the ranks of bryologists? Yet it is a step in the right direction.

Apart from the sponsorship of meetings and the stimulation of publications such as the Directory, A guide to the bryological herbaria of the world, the Supplements to Index muscorum and Index hepaticarum, and the Conspectus of bryological taxonomic literature, the dissemination of information by an International Newsletter was another major objective for the IAB. Since last year IAB now has two newsletters! Each has entirely different objectives, a substantially different readership and each is subject to completely different constraints. The Bulletin of Bryology, ably built up by our Honorary Secretary, has carried a variety of items the most important dealing with the research activities of particular groups, herbaria and Institutes. It has not only been read by the membership but also by all who read Taxon, a journal that distributes some 3000 copies/issue. In other words it is a 'flag carrier' and an important means of communication with the wider botanical world. If IAB is to increase its influence to such an extent that remarks such as "What about the bryologists?" become commonplace then the Bulletin of Bryology is a powerful instrument which we would do well to nurture along suitable lines with a clearly spelt out policy.

The Bryological Times on the other hand is normally only seen by bryologists and concerns itself primarily with everyday issues or practical matters more suited to an ephemeral publication appearing every two months rather than twice a year. The print run per issue is currently ca. 500 copies. Cheap to produce and with the ability to publicise information quickly, it circulates widely thus keeping bryologists in touch with each other and with the 'News'.

It also has two other purposes largely unattainable through the pages of the Bulletin. One is the attempt to portray bryologists as individuals, i.e. to add something more about the names below the title of a paper. Scientific literature as it stands records our bryological thoughts and ideas, but as editors encourage a terse impersonal prose with consequent dehumanization the essence of people, with a few exceptions as in obituary notices, rarely shows through. The second purpose is the provision of a channel for discussing topical issues.

The Bryological Times seeks to promote these objectives by portraying the personalities making the news, by encouraging an easy style, by exposing ridiculous views, by advocating courses of action and by entertaining as well as informing.

So the IAB has already found a number of activities which do not conflict with the interests of the National Societies, it can point with pride to more than a decade of achievement and it can go forward with an awareness of much to be done. As we draft our several agendas for the Business Meeting in Sydney (all ideas to the Honourable Secretary in Utrecht please) we could do worse than remember the vision which sustained us in the early days, well expressed by Dr. Steere, our then President, at the Leningrad Business Meeting (Bull. Bryol. VIII, Taxon 24 (5/6): 698-699, 1975) as follows:

"International bryology is by no means a new concept; it has been a dream of many bryologists for a long, long time. The International Association of Bryologists is simply the end-product of many generations of hopes and aspirations

"If the International Association of Bryologists can serve as a

bridge for friendship and co-operation between bryologists of different nations, different cultures and different kinds of governments, our most earnest aspiration for the organization will have been fulfilled".

REPORT OF A "MINI-SYMPOSIUM" ON
AFRICAN BRYOLOGY HELD IN POZNAŃ,
JUNE 1980

by T. Pócs.

SINCE PROFESSOR MAURICE BIZOT passed away, to our great sorrow, there is no bryologist who dares to identify and to deal with all the families of African mosses. He was the last member of the generation of H. N. Dixon and of R.A.L. Potier de la Varde who was prepared to work on whole African moss collections. Now a new generation grows up and nice revisions of families and genera are prepared by them, but large unidentified collections accumulate in different herbaria and many taxonomic groups wait for modern treatment. In the field of African hepaticology the situation is somewhat better because a long time ago several hepaticologists devoted themselves to the survey of different taxonomic groups and so the greater part of the African liverworts have been revised.

An almost full bibliography of African bryology was presented recently by S. W. Greene and A.J. Harrington (1979) which gives detailed information on the work done until now. Muscological studies for the continent have been discussed by S. R. Gradstein (1979), W. Schultze-Motel (1979) and by H. Ochi (in press), while the state of hepaticological research in Africa was surveyed by S.R. Gradstein (1979) and T. Pócs (in press).

Many of the bryologists who presently, or who hope to in the near future, deal with African bryology attended the second meeting of the Central and East European bryologists and so we called together a "mini symposium" to make an inventory of present activities. The list below was produced as a result of this meeting and contains only current or planned research and does not list completed revisions (for which see the above mentioned bibliographies). It is hoped that it will promote better co-ordination among bryologists by showing to whom accumulated African materials can be sent for revision and so avoid duplication of work or overlapping research. At the same time, we would like to stimulate other bryologists to deal with large, yet unrevised

groups of African bryophytes. The author of this article would be grateful to anyone who is not mentioned and who works on the taxonomy of African bryophytes or plans to do so - or those who are not properly mentioned - for a note about his or her activity.

MUSCI

- Sphagnaceae: A. EDDY (BM), Mrs. I. BAKALÁR (EGR).
Andreaea: O. MÅRTENSSON (UPS), D. VITT (ALTA) - ecostate species
 Fissidentaceae: Mlle M.-N. DURY (Dijon) - *Semilimbium*, Mrs. M.A. BRUGGE - MAN-NANNENGA(U)-Sections *Fissidens* and *Pachylomidium*
 Ditrichaceae: R. OCHYRA (KRA)
 Leucobryaceae: S. LISOWSKI (POZ)
 Dicranaceae: *Campylopus*: M. KILBERTUS (Nancy), J.-P. FRAHM (DUI), J. L. de SLOOVER (NAM) sub gen. *Pseudocampylopus* and P. SZMAJDA (POZ), *Leucoloma*: M. RAJCZY (BP). Other genera: P. SZMAJDA (POZ)
 Calymperaceae: West African: S. R. EDWARDS (MANCH); South and East African: S. ORBAN (EGR)
 Encalyptaceae: Mrs. D.G. HORTON (ALTA).
 Pottiaceae: R.E. MAGILL (PRE)
 Grimmiaceae: R. OCHYRA (KRA)
 Funariaceae: R. OCHYRA (KRA)
 Splachnaceae: A. KOPONEN (H). *Splachnobryum*: S. LISOWSKI (POZ)
 Mniaceae: T. KOPONEN (H)
 Bryaceae: M.A.H. MOHAMED (KLU), Mrs. G. KIS (Vácrátót)-gemmiferous *Bryum* species. The revision of other African genera is also needed, especially *Pohlia* and *Mielichhoferia* which are rich in afroalpine species, but not yet revised.
 Bartramiaceae: J.L. DE SLOOVER (NAM)
 Orthotrichaceae: Zygodontoideae: Mrs. I DÜLL-HERMANN (DUIS). Macromitrioideae: D.H. VITT (ALTA)
 Racopilaceae: B.O. VAN ZANTEN (GRO)
 Hedwigiaceae: R. OCHYRA (KRA)
 Cryphaeaceae: S. LISOWSKI (POZ); M. G. MANUEL (KLU) - worldwide revision;
 Leucodontaceae: M.G. MANUEL (KLU) - worldwide revision.
 Rutenbergiaceae: T. PÓCS (Vácrátót)
 Meteoriaceae: G.C.G. ARGENT (E) - revision of African species; M. G. MANUEL (KLU) - worldwide revision; S. LISOWSKI (POZ) - African *Floribundaria*.
 " "
 Neckeraceae: *Leptodon*: R. DÜLL (DUIS), J.L. DE SLOOVER (NAM). Revision of *Porotrichum* is badly needed
 Daltoniaceae, Hookeriaceae: M. R. CROSBY (MO).
 Hypnaceae: *Hypnum* and *Gollania*: H. ANDO (HIRO)

The following important moss groups - as far as we know - still wait for

a modern treatment for Africa: the rest of Fissidentaceae, Fabroniaceae, Amblystegiaceae, Brachytheciaceae (rich in afro-montane species), Entodontaceae, Plagiotheciaceae, Sematophyllaceae (very rich in Africa), Hypnaceae other genera, (esp. *Vesicularia* and *Mittenothamnium*), Polytrichaceae.

HEPATICAE

- Anthoceros*: E.W. JONES (OXF)
Herbertus: G. BUCHLOH (Hohenheim).
 T. PÓCS (Vácrátót)
Lepidozioideae: T. PÓCS (Vácrátót)
Isotaciaceae, *Gymnomitriaceae*, *Cephaloziaceae*, *Cephaloziellaceae*, *Jungermanniaceae*, *Lophoziaceae*, *Scapaniaceae*: J. VÁNA (PRC).
Plagiochila (re-examination), the rest of *Lejeunea*: E.W. JONES (OXF). *Plagiochila* of Madagascar C. VANDEN BERGHEM (Louvain).
Marchesia: Miss P.E. GEISLER (G)
Brachiolejeunea, *Pachylejeunea*, *Symbyezidium*: S.R. GRADSTEIN and M. A. VAN SLAGEREN (U)
Cheilolejeunea complex, other doubtful genera of *Lejeuneaceae*, *Symphogyna*, *Wiesnerella*, *Asterella*:
 R. GROLLE (JE), *Chilolejeunea*: E.W. JONES (OXF)
Cololejeunea and *Diplasiolejeunea*: Madagascar and Macarene species: P. TIXIER (PC)
Aphanolejeunea: T. PÓCS (Vácrátót) - worldwide revision
Metzgeriaceae: Y. KUWAHARA (NICH) - worldwide revision
Marchantia: Mrs. H. BISCHLER (PC) - worldwide revision
Riccia: Mrs. S. JOVET-AST (PC) - worldwide revision
Notothylas: Mrs. G.G. HASSEL DE MENÉNDEZ (BA), E.W. JONES (OXF)
 Other *Anthocerotales* and the genus *Fossombronina* still need revision.

NEW CHECKLISTS IN PROGRESS

- Bryophytes of North East Africa, incl. Libya, Egypt, Sudan, Ethiopia and Somali: T. KOPONEN (H)
 Mosses of Central Africa, incl. Zaire Rwanda and Burundi: J.L. DE SLOOVER (NAM)
 Mosses of South East Tropical Africa, incl. Angola, Zambia, Zimbabwe, Mozambique, Tanzania, Uganda and Kenya: Mrs. G. KIS (Vácrátót)
 Mosses of Madagascar and the Mascarenes: M.R. CROSBY (MO) and W. SCHULTZE-MOTEL (B)
 Liverworts of Tropical Africa: Mrs. K. SZAKÁCS and T. PÓCS (Vácrátót).
 Liverworts of Ghana and Sierra-Leone: E.W. JONES (OXF)

REFERENCES

- Gradstein, S.R. (1979): Directory of bryologists and bryological research. Ed.2. *Regnum veg.* 99, 81pp.
 Greene, S.W. and A.J. Harrington (1979): *The bryological literature of Africa, together with some Atlantic and Indian Ocean Islands*. In Greene, S.W. and A.J. Harrington Eds. A conspectus of bryological taxonomic literature. Ser. A. Fasc. I, 141 pp. Penicuik, Institute of Terrestrial Ecology.
 Ochi, H. (in press):
 Pócs, T. (in press): Exploration of hepatics in subsaharan Africa. *Boissiera*.
 Schultze-Motel, W. (1979): Die Laubmoose Afrikas. Eine Übersicht über den Stand unserer Kenntnisse *Willdenowia* 9: 87-97.
 Botanical Institute of the Hungarian Academy of Sciences, H-2163 VÁCRÁTÓT, Hungary.

A MEETING WITH PROF. VAN DER WIJK
Groningen - 30 October

THIS MORNING at 9 a.m., with Dr. B. O. van Zanten, I visited Prof. R. van der Wijk and his wife at their elegant home in the Van Houtenlaan. Although we had corresponded it was our first meeting. I was delighted by his humour, his lively and lucid discussion, and the realization that although retired since 1965 he was still keenly interested in what was going on in the world of bryology. Naturally we spoke of *Index muscorum* and he was very pleased to hear that the penultimate text of the 11-Year supplement 1963 - 1973 has been promised for Sydney. We also discussed *Buxbaumia* another of his creations.

In spite of being an octogenarian plus 5 he is still working with mosses although not full time now since his summer house (called Erica) in the woods at Dwingelo is his greatest delight. But he is striving to produce something all would welcome - a vegetative key to the moss genera of the world! As he sipped his bouillon (beef tea) he revealed that he liked cryptograms and was looking forward to trying Rednaz's teasers in the last issue. He is even considering composing some!

But he has another ambition not yet realised. He saw the end of the 19th Century, has achieved much in the 20th Century - with more to come - and then

admitted it would give him much pleasure to see the start of the 21st. As a 3-century man, with his other achievements, wouldn't he be unbeatable? Vive l'Patriarche!

S. W. Greene

BRYOLOGY IN VANCOUVER - JULY 1980

by Dale H. Vitt and Diana G. Horton

TWO MEETINGS WERE held at the University of British Columbia in July, 1980. The first called Botany 80 held between July 12 and 16 was the combined meetings of five societies including the Canadian Botanical Association, Botanical Society of America and the American Bryological and Lichenological Society. Immediately following these meetings, between July 17 and 24, the Second International Congress of Systematic and Evolutionary Biology was convened. Just before Botany 80 and again after ICSEB II, W.B. Schofield led field trips to the Queen Charlotte Islands.

The day of July 13 was spent by nearly everyone (about 40) travelling to nearby Cypress Bowl on a field trip organized and led by Wilf Schofield. With Wilf keeping the flock together, everyone managed to return to the residences in time for dinner. The ABLS breakfast was held the next morning with the first symposium following directly.

An extensive program was planned for Botany 80 highlighted by two symposia organized by Tom Nash. The opening symposium entitled "The use of SEM and TEM in bryological and lichenological research", presided over by Dale Mueller, included eight papers from a wide range of studies on both lichens and bryophytes. Personally speaking, the paper by Roy Brown and Betty Lemon on ultrastructure of moss spores was outstanding. The second symposium held the next morning contained papers on the "Physiological ecology of poikilohydric plants". Peter Rundel presided with four papers given, all based on lichen studies.

Adding to these two symposia, the afternoons of the 14th and 15th contained contributed paper sessions. The first of these, entitled "Morphology and taxonomy of cryptogams", was presided over by Martyn Dibben and contained 4 papers on lichens and 9 on bryophytes. Of note to us was the report of extensive travel and years of research and detective work(!) by Bill Reese in his excellent discussion of

"Anomalous cells in the leaves of Gulf Coast dune mosses". His presentation was a lesson for all of us on how to present papers at meetings. On the afternoon of July 15 the second contributed paper session entitled "Physiology and ecology of cryptogams", with Tom Nash presiding, was held. Of the 13 papers presented 9 pertained at least in part to bryophytes. Our award of excellence would go to Cliff Smith for his paper on the "Lichen and bryophyte flora of fumaroles in Hawaii Volcanoes National Park". This session was immediately followed by the business meeting of ABLS which unfortunately we were unable to attend and those of you who wish details will just have to wait for the Minutes of the meeting. Significantly, however, what we did go to (and so did everyone else!) was the ABLS Social which for once had sufficient drink and food for everyone.

During the later portions of Botany 80 and the early parts of ICSEB II most people had an opportunity to travel to the surrounding coastal regions of British Columbia. Many of the lichenologists, accompanied by occasional stray bryologists, spent a day on Salt Spring Island while others ventured inland. Hélène Bischler and ourselves visited Manning Provincial Park, while later on the 22nd a largely hepaticologically-oriented group (Ramsay, Schuster, Engel, Horton, B. Murray, D. Murray and Margadant) visited Mt. Seymour and successfully collected Schofieldia (John found it, not Rudy!)

On the morning of July 19th, the single contributed paper session of ICSEB II containing bryological papers was held - it was given the title of "B". Of the 12 papers presented, 4 were bryological in nature and included papers by Hisa Ando, Helen Ramsay and ourselves. Several interesting symposia were held during the Congress. One of which we particularly remember on "Green Algae and land plant origins" contained a presentation by K.R. Maddox G.L. Floyd and K.D. Steward and advocated the antithetic theory of alternations of generations. (Hisa Ando was particularly impressed by this presentation. See Proc. Bryol. Soc. Japan 2(6) 80-83, 1978 for his views on this subject!).

Towards the end of the ICSEB II meetings a symposium on "The ecological significance of morphological characters in bryophytes" was held. Organized by Marshall Crosby and Wilf Schofield, the session contained five presentations all except one about 35

minutes in length. An attendance of around 50 or 60 persons was recorded and all were kept attentive by the alarm utilized by Marshall Crosby who presided over the sessions.

Rudy Schuster, although noticeably hampered by the early morning hour of his presentation, in his inimitable style criticised the stupidity of the Jungermanniidae for not being able to adapt to xerophytic conditions while Hélène Bischler, presenting a joint paper with Suzanne Jovet-Ast, seemed quite satisfied with the evolutionary adaptation of the xerophytic Marchantiales. Her presentation included nicely done photographs and SEM micrographs and was given in excellent English. Mosses were divided into three parts - gametophyte, sporophyte and spores. Wilf Schofield presented a joint paper with Marshall Crosby and as always Wilf was a gold-mine of information, so much so that we only learned of protonematal adaptations! The entire paper will be, no doubt, a significant contribution when brought to light in publication. The sporophyte was considered by Dale Vitt who nervously presented twice as many slides as he should have and dealt primarily with peristome and capsule adaptations. Gert Mogensen, utilizing a large quantity of data, presented the final paper on the biological significance of spores. Gert's presentation (which did shorten our lunch hour) completed the symposium which is planned for publication in an early issue of The Bryologist.

It appeared to us that the two meetings were both a delightful success, largely due to the efforts of Wilf Schofield and the organization of Tom Nash and Iain Taylor of Botany 80 and Marshall Crosby of ICSEB II. Last but not least, many of us finally attained enough nerve to wander through the Biological Sciences Building (the layout has to be seen to be believed!) of the University of British Columbia long enough to (a) find Wilf's office and (b) discover the herbarium on the fifth floor (there are only four floors marked on the elevator). We have confirmed that Wilf does have a truly great herbarium and that somewhere in his office all of your letters and specimens are present (somewhere!).

Department of Botany, The University of Alberta, Edmonton, Alberta, Canada T6G 2E9.

CULTIVATION OF BRYOPHYTES

by H. Inoue

I HAVE READ with great interest a note by Mr. B.G. Bell on "Cultivation of mosses" (Bryol. Times, 2:1-2). Naturally, depending on the purpose of cultivation, many different techniques may be employed. In my laboratory, I am cultivating many liverworts for the purpose of cytological study both of their oil-bodies and their chromosomes. Material is grown in a small cabinet (2 m wide x 1 m deep x 1.5 m high) in which the temperature is regulated to 10-15°C and the light intensity to about 2,000 lux (duration of light 12 hrs/day). When the samples are stored in this cabinet the dishes (20cm in diam. x 15cm high) are covered with a thin plastic film to protect them from drying. Of course the samples are moistened before putting them in the cabinet. By this means most liverworts can be cultivated satisfactorily for long periods and they grow very well; in the case of *Pal-lavicinia*, *Makinoa* etc. almost no morphological differences were observed between plants cultivated in this way and those gathered from the field.

As is well known in Japan the cultivation of bryophytes is also very popular outside of the laboratory e.g. in "moss gardens" and in "moss pots". The moss gardens of the temples in Kyoto are the most famous where the main mosses are *Leucobryum neilgherrense* and *Polytrichum commune*. However, even in private homes small moss gardens are now becoming popular, especially in western Japan, where species of *Hypnum* and *Racomitrium* are those most commonly cultivated. Frequently special watering regimes and maintenance may be required. The bryophytes used in moss gardens are usually gathered direct from the field but they may be obtained from horticultural shops; for example, four or five colonies of living *Leucobryum neilgherrense* (about 5 x 5 cm in size) cost about 300 yen (ca. US \$1.5).

When I was in the USA, it was possible to buy at a horticultural shop a large packet (about 30x20cm) of *Hypnum* spp. which was labelled "Garden moss". Are they commonly used in North American gardens? Unfortunately I had no opportunity to see a garden cultivated with such species in North America. What other horticultural uses are bryophytes put to?

National Science Museum, Hyakunin-cho, Shinjuku-ku, Tokyo 160, Japan.

XIII INTERNATIONAL BOTANICAL CONGRESS

Sydney 21 - 28 August 1981

Section 8A Bryology

A provisional programme for Section 8A was published in Bryol.Times 3:4.

The major difference in the present version is that Dr. C. Suire has organised a half-day symposium on Chemosystematics and phylogeny. As a consequence, the symposium on biosystematics and structure is now only half a day long.

Dr. S. Hattori has agreed to publish the conference proceedings in Journal of Hattori Botanical Laboratory. All contributions to the symposia will be limited to 10 published pages each, including illustrations. Contributions as poster sessions will be limited to a total of 4 published each. All manuscripts will be due in final form at the time of the congress.

It should be borne in mind that what follows is the 'best estimate' of present arrangements and is more up-to-date than what appears on p.14 of the Congress 2nd Circular. For example it is not sure that all contributors listed will be able to come although all have expressed a determination to try. Furthermore, not all the titles or names of contributors to the poster sessions are available.

Anyone still wishing to participate should contact Dr. Scott and the relevant session convenor(s) without delay. The Diary on p.9 of this issue gives the latest dates for registration, receipt of abstracts etc.

Latest(December) version of programme:

Day 1. —

- a.m. Morphogenesis and physiology.
Conveners: Professor E.-J. Bonnot
and Dr. P.M. Selkirk
- p.m. Reproductive biology and ecology.
Conveners: Prof. L.E. Anderson
and Dr. H.P. Ramsay

Day 2.

- a.m. Chemosystematics and phylogeny.
Convener: Dr. C. Suire.
- p.m. Biosystematics and structure,
Conveners: Dr. H. Inoue,
Dr. S.W. Greene and
Prof. D.G. Catcheside

Day 3.

- a.m. Bryogeography of Australasia and
the Pacific.
&
Conveners: Dr. W. Schultze-Motel
and Dr. G.A.M. Scott
- p.m.

Latest list of contributors and titles

Morphogenesis and physiology:

- Basile, D.V. - Evidence for a regulatory role of cell-surface hydroxyproline-containing-proteins in liverwort morphogenesis.
- Bopp, M. - How can external hormones regulate the morphogenesis of bryophytes.
- Demkiv, O.T. - Cellular organization and gametophyte development in mosses.
- Fedyk, J.D. - Experimental control of alternative morphogenetic paths in *Tetraphis pellucida*.
- Glime, J.M. - Physiological adaptations in *Fontinalis*.
- Halbsoth, W. - Morphogenesis in *Marchantia polymorpha*.
- Johri, M.M. - Control of chloronema and caulonema differentiation in mosses.
- Kaufman, P.B., Dayanandan, P., Thomas, R. & Taylor, J. - Comparative analysis of rapid growth responses using three model systems: *Conocephalum* archegoniophores, *Pellia setae* and *Avena internodes*.
- Kaul, A. & Patidar, K.C. - Physiological studies on three species of *Riccia*.
- Kaul, A. & Bhansar, S. - Physiological studies on *Plagiochasma intermedium*.
- Maravolo, N.C. - On the control of endogenous auxin levels in liverworts.
- Mehra, P.N. - The role of an experimental morphogenesis in liverwort phylogeny.
- Nehira, K. - Morphogenesis in *Marchantia gemmae*.
- Niklas, K.J. - Mathematical simulations of radial-dorsiventral transitions in bryophytes.
- Ohta, Y. - Induction of calluses in cell suspension cultures of liverworts.
- Otto, K.R. & Fritsche, M. - Decrease of ATP in *Marchantia gemmae*, a parameter for the uptake of IAA.
- Ripetsky, R.T. - The stability of the aposporic gametophyte of *Pottia intermedia*.
- Rudolph, H. - Physiological aspects of phenolic components in the cell wall of Sphagna.
- Spiess, L.D., Lippincott, B.B. & Lippincott, J.A. - Bacteria-moss interactions in the regulation of *Pylaisiella selwynii* development.
- Stange, L. - Meristem structure and activity in *Riella*.
- Szweykowska, A. - The role of cytokin-

- ins in the development and metabolism in mosses.
- Tutschek, R. - Physiological aspects of the red wall pigment synthesis in *Sphagnum magellanicum*.
- Ulychna, K.O. - The anomalous location of gametangia on moss gametophores.
- Valanne, N., Aro, E.V. & Niemi, H. - Photosynthetic apparatus of mosses.
- Woodfin, C.M. & Bold, H.C. - Morphogenetic studies on Ricciaceae with emphasis on *Riccia hirta*.
- Reproductive biology and ecology:
- Anderson, L.E. - Cytological and genetic barriers in mosses.
- Longton, R.E. - Genecology of bryophytes.
- Oechel, W. - Physiological ecology of mosses.
- Ramsay, H.P. & Berrie, G.K. - Sex determination in bryophytes.
- Scott, G.A.M. - The ecology of bryophytes - an overview.
- Slack, N. - Bryophytes in relation to ecological niche theory.
- Wyatt, R. - Population ecology of bryophytes.
- Chemosystematics and phylogeny:
- Asakawa, Y. - Terpenoids and aromatic compounds as chemosystematic indicators in Hepaticae and Anthocerotae.
- Karunen, P. - Evolutionary significance of lipids in bryophytes.
- Krzakowa, M. - Isozymes as diagnostic characters in the taxonomy of liverworts.
- Markham, K.R. - The evaluation of flavonoid character as taxonomic and phylogenetic indicators.
- Matsuo, A. - Chemotaxonomical characteristics of liverwort sesquiterpenoids.
- Mues, R. - Phenolic compounds of the liverwort families Scapaniaceae and Lophoziaceae, a contribution to the relationship of both families.
- Suire, C. - Biosynthetic level and systematic position in liverworts.
- Vanderkerkhove, O. - Studies on the distribution of flavonoids in mosses in relation to their taxonomy.
- Zinsmeister, H.D. - Phytochemical studies on the flavonoid chemistry of liverworts.
- Biosystematics and structure:
- Berrie, G.K. - Cytology and liverwort classification.
- Brown, R.C. - Ultrastructural aspects of moss meiosis.
- Carothers, Z.B. - Comparative spermatogenesis in the Sphaerocarpaceae.
- Duckett, J.G. - Spermatozoids and bryophyte systematics.
- Frey, W. - Structure of the shoot apex in mosses.
- Horton, D.G. - The evolutionary significance of superficial spore structures in the Musci.
- Koponen, A. - On the structure and function of the peristome in Splachnaceae.
- Lemmon, B.E. - Ultrastructural aspects of moss meiosis.
- Longton, R.E. - Biosystematic approach in bryology.
- Ramsay, H.P. - The value of karyotype analysis in mosses.
- Smith, A.J.E. - Aspects of biosystematics in bryophytes.
- Snider, J.A. - The mass data on cytology of mosses.
- Szweykowski, J. - Biosystematic methods and the classification of the hepatics.
- Wigh, K. - Cytotaxonomical studies in some *Brachythecium* species.
- Bryogeography of Australasia and the Pacific:
- Ando, H. - *Hypnum* in Australasia and the southern Pacific.
- Campbell, E.O. - Anthocerotae of New Zealand.
- Catcheside, D.G. - The geographical affinities of the mosses of South Australia.
- del Rosario, R.M. - Mosses of the Cordillera Central, Luzon, Philippines.
- Gradstein, S.R. & Weber, W.A. - Bryogeography of the Galapagos Islands.
- Inoue, H. - Speciation and distribution of *Plagiochila* species in Australasia and the Pacific.
- Iwatsuki, Z. - *Fissidens* in New Caledonia.
- Koponen, A. - The Splachnaceae in Australasia and the Pacific.
- Koponen, T. - The Mniaceae in Australasia and the Pacific.
- Ochi, H. - The Bryoideae in Australasia.
- Schuster, R.M. - The cold Antipodes as a centre of survival and endemism of Jungermanniidae.
- Seppelt, R.D. - *Ditrichum* and other genera of Ditrichaceae in Australasia and the Pacific.
- van Zanten, B.O. - Germination experiments on mosses from the Philippines.
- Vitt, D.H. - Adaptations and origins of sub-Antarctic mosses.

As advertised in the Bryol. Times 1:5, Dr. B.O. van Zanten is organizing a pre-Congress bryological field trip to Papua-New Guinea. There are still some places available and anyone interested in participating should write immediately to Dr. van Zanten

Biologisch Centrum, P.O. Box 14, Haren (Gro), The Netherlands.

As well as the special bryological excursion in the week preceding the Congress (Monday 17 August - Thursday 20 August) there will be a single day tour of the Blue Mountains on Sunday 23rd (cost A \$22.50) which will take in some of the ground covered in the main bryological excursion, although it is not an official part of the Section 8A programme. Informal trips to the same area may be possible during the Congress.

The actual dates of the bryophyte symposia are expected to be Monday 24 August - Wednesday 26 August, with the bryology dinner on Wednesday night.

We hope that many bryologists will also take the opportunity to visit other parts of Australia and we will do all we can to assist with local field trips. For those who don't mind a sleeping bag on the floor or in a tent outside, we will be happy to offer what hospitality we can in Melbourne.

G.A.M. Scott, Chairman, Bryology Section Committee, Department of Botany, Monash University, Clayton, Victoria 3168, Australia.

DIARY

SECRETARIES OF BRYOLOGICAL SOCIETIES, organizers of symposia, workshops or anyone with knowledge of a meeting or event of interest to bryologists which has not yet taken place and has not already been noticed in these columns are asked to send details direct to the Editor of this Newsletter. The more complete and up to date the diary is, the more useful it will be.

ABLS = American Bryological and Lichenological Society.

BBS = British Bryological Society

IBC = International Botanical Congress

SBLS = Swiss Bryological and Lichenological Society.

1981

23 Jan. IBC. Latest date for field trip bookings and Congress registration if attending field trip See Bryol. Times 6:6

7-8 Feb. SBLS. Determination course on hepatics in Bot. Inst., Univ. Zürich by Dr. E. Urmi.

1 March. Latest date for registration for June ABLS Annual Meeting at Highlands.

9-12 March. Ulm/Donau(BRD). Palaeobotany of bryophytes in 6th Symposium on morphology, anatomy and systematics of plants. See Bryol. Times 6:6.

8-15 April. Bury St. Edmunds, Suffolk (England). Spring field meeting of BBS. Details to be announced in Bull. BBS No. 37.

15 May. IBC Latest date for registration at special rate and for submission of abstracts. See Bryol. Times 6:6

7-12 June. Highlands, North Carolina. Annual meeting of ABLS. Details from Dr. T.H. Nash, Dept. of Botany & Microbiology, Arizona State Univ. Tempe, AZ 85281, U.S.A.

3-5 July. 25th Annual Assembly of SBLS at Conservatoire Botanique, Genève. Lectures and excursions to the Alps in Haute-Savoie.

27 July-11 Aug. Newtonmore and Tyndrum(Scotland). Summer field meeting of BBS. Details to be announced in Bull. BBS No. 37.

Mid Aug. Bloomington, Indiana (University of Indiana). Bryological and Lichenological Section of the Botanical Society of America. Meeting in conjunction with American Institute of Biological Sciences. Further details from Dr. S. Tucker, Dept. of Botany & Plant Path., Louisiana State University, Baton Rouge, LA 70803 U.S.A.

21-28 Aug. Sydney IBC. For programme details see Bryol. Times this issue p.7-9. See 3:4 and 1:5 regarding proposed pre-Congress field trip.

27-31 Aug. SBLS Field meeting in canton Obwalden, Central Switzerland. Organizer Dr. E. Urmi.

18-20 Sept. BBS. Annual paper reading meeting. Venue to be announced.

21-22 Nov. Taxonomic workshop meeting of BBS. Venue to be announced.

1982

Prague. 3rd biennial meeting of Central and East European bryologists. See prelim. notice in Bryol. Times 5:5.

1983

Feb. Dunedin(New Zealand). Pacific Science Congress. See prelim. notice Bryol. Times 3:4.

CONSTITUTION COMMITTEE PREPARES
TO START WORK

IT CAN NOW BE ANNOUNCED that the committee set up by the President to review the current Constitution of IAB (see *Bryol. Times* 6:3) has the following membership: Dr. G. Mogensen (Copenhagen), Chairman; Dr. S. W. Greene (Penicuik); Dr. Z. Iwatsuki (Nichinan); Dr. W.C. Steere (New York) and Dr. S.R. Gradstein *ex officio* (Utrecht). Drs. Gradstein, Greene and Mogensen had an informal discussion on some of the issues in Utrecht on the 30th October, when Dr. Mogensen explained that he hoped to have a statement ready for the business meeting at Sydney.

All readers with views which they would like to have considered are encouraged to get in touch with Dr. Mogensen or any member of the committee as soon as possible.

Desiderata

I AM CURRENTLY revising the New Zealand species of *Macromitrium* and I would very much like to examine and annotate any specimens that are available. Please send any you have to:

Dale H. Vitt, Department of Botany,
University of Alberta, Edmonton,
Alberta T6G 2E9.

These will be returned promptly.

Personalia

DR. G.K. BERRIE, formerly of Univ. of Jos, Nigeria has moved to Chancellor College, P.O. Box 280, Zomba, Malawi.

AS FROM JANUARY 14, 1981 Dr. R. D. Seppelt's address will be: Antarctic Division, Department of Science and The Environment, Channel Highway, Kingston 7150, Tasmania, Australia.

DR. BENITO C. TAN has finished his study at the University of British Columbia and returned to Philippines to join the faculty staff of the Dept. of Botany, University of the Philippines at Los Baños, College, Laguna, Philippines. From now on all correspondence should be sent to him at the new address. Dr. Tan will be studying the taxonomy of Philippine bryophytes, mainly mosses, and is interested in exchanging determined or named moss specimens for those found outside the Philippines.

Field Trip

VISIT TO ICELAND

MRS. P.N. HOOPER, the wife of Dr. M. Hooper, Monks Wood Experimental Station, Abbots Ripton, Huntingdon PE17 2LS, UK, will be visiting Iceland next summer on a botanical expedition. Mrs. Hooper, who has worked in Iceland before and has a working field knowledge of bryophytes, has offered to collect material if she is clearly instructed what exactly is required. Anyone requiring material should write to her directly enclosing small voucher specimens as an aid to identification.

Recent Publications

Australasian Bryol. Newsletter, No.3.
1980.

Bull. Bryol. No. XIX in Taxon 29(5/6):
671-681, 1980.

Cryptogamie, Bryol. Lichen Vol. 1,
Fasc. 3, 1980.

J. Hattori bot. Lab. No. 48, 1980.

Miscnea bryol. lichen. Vol.8, No. 8,
1980.

LANDWEHR, J., GRADSTEIN, S.R. & H.van
MELICK, 1980. Atlas Nederlandse
Levermossen 1st Ed. Koninklijke
Nederlandse Natuurhistorische Vereniging
287 pp. In Dutch.

NA-THALANG, O. 1980. A revision of
the genus *Riccia* (Hepaticae) in
Australia. Brunonia 3(1): 61-140.

SCHUSTER, R.M. 1980. The Hepaticae
and Anthocerotae of North America,
east of the hundredth meri-
dian. Vol. 4, 1344pp. Columbia Uni-
versity Press, New York and London.

ITEMS FOR THE NEXT ISSUE to be with
the Editor, Dr. S. W. Greene, Institute
of Terrestrial Ecology, Bush Estate,
Penicuik, Midlothian EH26 0QB,
Scotland, Telex BUSITE 725796, by
15 February at the latest.

CORRESPONDENCE CONCERNING MAILING etc.
to M. A. van Slageren, Instituut voor
Systematische Plantkunde, Heidelberg-
laan 2, 3584 CS Utrecht.

PUBLISHED BY The International Association
of Bryologists, Utrecht.