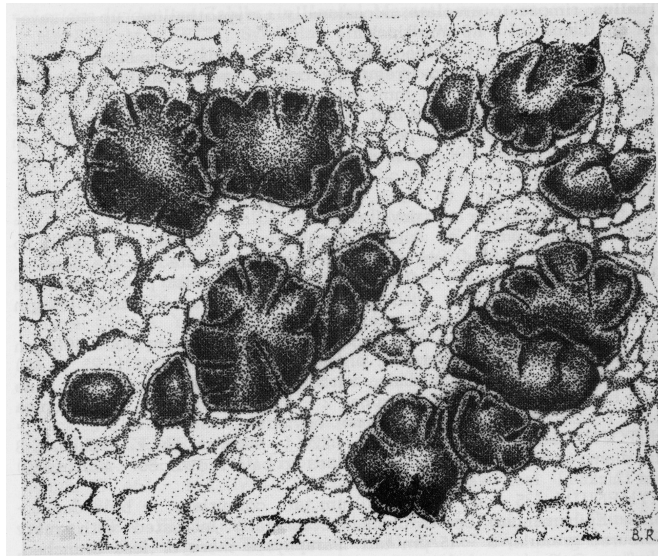


INTERNATIONAL LICHENOLOGICAL NEWSLETTER

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The opinions expressed in the *Newsletter* are not necessarily those held by the International Association for Lichenology

INTERNATIONAL ASSOCIATION FOR LICHENOLOGY

The International Association for Lichenology (IAL) promotes the study and conservation of lichens. It organizes symposia, field trips, and distributes a biannual newsletter. There is a listserver that enables on-line discussion of topics of interest. Webpages devoted to lichenology are also maintained by members of the Association. People wishing to renew their membership or become members of IAL are requested to send their subscription (one payment of 40 USD for 2005-2008) to either Treasurers.

The **International Lichenological Newsletter** is the official publication of IAL. It is issued twice a year (July and December) in English. The *Newsletter* is also available on the Internet. The *Newsletter* is divided into four main sections: 1) **Association news**: official information concerning the Association, such as minutes of Council meetings, proposals of Constitutional changes, new members, changes of addresses, etc. 2) **News**: information about lichenologists, institutional projects, herbaria, requests of collaboration, announcements of meetings, book reviews, etc. 3) **Reports**: reports of past activities, short lectures, obituaries, short historical novelties, etc. 4) **Reviews**: presentation of recent progress and other topics of interest in lichenology with optional discussion. When the material exceeds the available space, the Editor will prepare a summary, on prior agreement with the contributors.

Any information intended for publication should reach the Editor on or before June 15 and November 15 for inclusion in the July and December issues, respectively.

IAL affairs are directed by an Executive Council elected during the last General Meeting. Council members elected at the IAL5 Symposium (Tartu, Estonia, 2004) are listed below, and will serve until 2008.

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ASSOCIATION NEWS

New Acharius medallist

Mark R. D. Seaward

Over the last forty years, Professor Mark Seaward has touched the lives and careers of a great number of lichenologists around the world. Mark carried out pioneering studies on lichen ecology of industrially contaminated land. This brought him into contact with a great many botanists and developed his genuine interest in people. Now, he has an enormous circle of correspondents that includes students, amateurs and professional lichenologists. Indeed, Mark does not limit himself to the living, but has researched and written about lichenologists and botanists of the past providing fascinating details and insights. He has also examined their collections in understudied herbaria, like the one at Oxford University, doing handwriting and other detective work to identify specimens, collectors and locations.

In 1977, Mark Seaward edited 'Lichen Ecology', which provided the framework for modern lichen ecology, and he has written or contributed to over 400 articles, research papers, conference proceedings, editorials and book chapters. In the last three years



Mark Seaward receiving the Acharius Medall from David Richardson during the Annual General Meeting of the British Lichen Society in London January 2007. (Photograph by Jeremy Grey).

alone, he has had more than 40 contributions. In sharing his research results with others, he has been an outstanding lecturer at many international conferences.

Mark played a major leadership role in the development of the first effective national lichen mapping program, the British Lichen Society Mapping Scheme Data Base, and he has kept it going and growing over the past 30 years providing anyone interested with maps for research papers or popular books such as Frank Dobson's "Lichens: An Illustrated Guide". He still spends at least an hour each morning entering new records received from lichenologists into the mapping data base. The result of this huge mapping effort has been a continued enthusiasm for field work in the UK and a well documented basis for investigating new sites and particular lichen taxa. It is hard to imagine how Mark manages all this when there are only 24 hours in a day.

Born and raised in Lincolnshire in England, Mark Seaward migrated progressively northwards in his academic career from Birmingham to Nottingham and finally to Bradford University in Yorkshire where he was awarded his Ph.D and D.Sc. His contributions to lichenology have been recognized by being awarded the Ursula Duncan Medal from the British Lichen Society and an honorary degree from the University of Wroclaw in Poland. The latter rewarded achievements from more than 20 years of research collaboration and Mark's role in fostering lichenology in that country. Indeed, Mark has been the source of help and support for lichenologists in many other countries, especially those with limited lichenological resources.

Mark recently retired from Bradford University but has been invited to continue there as Honorary Research Professor in Environmental Biology. As the focus of his career changes from lecturing and supervising, to doing unencumbered personal research, it is a fitting moment to recognize Mark Seaward's tremendous impact on the field of lichenology over the past four decades. Today we celebrate this achievement by awarding him an Acharius medal. He is a friend to many, a most distinguished colleague, and we wish him many more productive years in lichenology.

David H. S. Richardson, Halifax

Mason Hale Award

Presented to **Silke Werth**

This year's Mason Hale award goes to Silke Werth for her dissertation *Dispersal and persistence of an epiphytic lichen in a dynamic pasture-woodland landscape*. Silke is an ecologist/conservation biologist that is equally comfortable in the field working under harsh conditions in the snow, in the lab doing molecular studies on degenerated DNA, and on the computer developing simulation programs to test hypotheses about ecological processes in a forest-dominated landscape.

Tourists who spot Silke somewhere in the field, collecting several hundred kilograms of snow in a forest in the middle of nowhere would probably agree that the person must be a scientist – no normal person would do something similar. But nobody

would guess that this researcher is a botanist, a mycologist or, in fact, the ideal synthesis of the two disciplines – a lichenologist. The material being sought in the snow is smaller than the famous needle in the haystack; it is a diaspore in the landscape. But Silke managed to detect the quasi-nothing in the lab and to build a model to show how a rarely seen lichen can disperse a few propagules in an endless forest in a way that allows the species to remain rare but, hopefully, not go extinct. In other words:

Silke Werth's PhD dissertation is a significant contribution to the understanding of the population dynamics of endangered epiphytic lichen species. The thesis is extremely successful in disentangling a complex ecological problem: how a rare epiphytic lichen can disperse and persist in a dynamic, highly structured landscape of Medieval origin. Her studies involved a multitude of methodologies including molecular techniques that allowed her to detect diaspores of the target species in complex litter samples, microsatellite analyses to investigate the diversity and differentiation of local demes of an epiphytic lichen, as well as transplants of lichen fragments and diaspores to study the potential distribution of the species in a topographically complex landscape.

This outstanding student established a very successful collaboration with a spatial ecologist that allowed her to make a significant contribution to the theoretical analysis of spatial genetic structures of continuous populations. This approach has considerable advantages over the traditionally used calculation of correlograms such as Moran's I and allowed her to address gene flow at the landscape level and thus to make a substantial contribution to landscape genetics, a promising field that integrates landscape ecology and population genetics.

Most studies of population genetics involve spatially segregated populations at large scales. There is very little information on landscape-level organisation of genetic variability and gene flow patterns despite its potential importance for population conservation and persistence. The PhD thesis included five papers of which four have been published or are now in press; one paper is under review.

Silke did her PhD at the University of Berne in the lab of Christoph Scheidegger at the Swiss Federal Research Institute for Forest, Snow and Landscape Research in Birmensdorf, Switzerland. At present, she is on a postdoctoral fellowship at Victoria Sork's lab at the University of California, Los Angeles. In her new position Silke is studying the phylogeography of *Ramalina menziesii*.

Christoph Scheidegger, Birmensdorf

Changes of address

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The 6th IAL Symposium – First announcement

The 6th IAL Symposium Lichens in the New World will be held at Asilomar Conference Grounds, Monterey Peninsula, California, USA July 13-19, 2008. It will be held jointly with the annual meeting of the American Bryological and Lichenological Society.

The scientific program will be finalized during the summer of 2007. A mixture of formal symposia, poster sessions, a few selected lectures, workshops and discussion sessions are anticipated. In the meanwhile

suggestions may be sent to any of the program committee members listed below or entered at the IAL web site by 31 May, 2007 at http://www.lichenology.org/IAL6_ABLS/.

Members of the IAL Program Committee are **Thomas H. Nash III**, Chair, (tom.nash@asu.edu); **James D. Lawrey**, Lichenicolous fungi, (jlawrey@gmu.edu); **Bruce McCune**, Community ecology, (Bruce.McCune@science.oregonstate.edu); **Linda Geiser**, Air pollution, (lgeiser@fs.fed.us); **Leo Sancho**, Polar studies, (sancholg@eucmax.sim.ucm.es); **Christian Printzen**, Populations & Biogeography (christian.printzen@senckenberg.de); **Robert Luecking**, Systematics & Floristics (rluecking@fieldmuseum.org); **Stefan Ekman**, Molecular Systematics, (stefan.ekman@bio.uib.no) and **Christina Máguas**, Physiology & Ecophysiology (christina.maguas@icat.fc.ul.pt).

The Asilomar Conference Grounds are on the Pacific Ocean near Monterey Peninsula, California. Asilomar offers over 40 extraordinary hectares (100 acres) of forests, dunes, and coastline situated right on the Monterey Bay National Marine Life Sanctuary. They also offer many meeting rooms, a variety of accommodations and full meal service. (See: Asilomar Conference Grounds <http://www.visitasilomar.com>).

Currently three field trips are anticipated: (1) Pre-congress – 2-3 days – coastal, southern California – lead by Lawrence Glacy, Susi Alterman and Tom Nash, (2) Pre- or post-congress – 3-4 days – northern California (coast to the Sierras) – lead by Larry St. Clair and Eric Peterson and (3) Post-congress – ca. 10 days – Monterey to Portland, Oregon or Seattle Washington – lead by Bruce McCune and Katherine Glew. Trips 1 & 2 are anticipated to start and end in Monterey (Pacific Grove where Asilomar is located); trip 3 will only begin in Monterey. Details will be available in the 2nd circular.

To receive the second circular, please e-mail your name, full address and e-mail address to Robin Schroeder (robin.schroeder@asu.edu) or Tom Nash (tom.nash@asu.edu) or send us a letter with your name and address to IAL 6 Secretariat, ASU Lichen Herbarium, School of Life Sciences, Arizona State University, P.O. Box 874501, Tempe, AZ 85287-4501, USA.

The Editor

NEWS

New Literature:

ARCHER, A. W. 2006. The lichen family Graphidaceae in Australia. – Bibliotheca Lichenologica 94. – J. Cramer in Gebr. Borntraeger Verlagsbuchhandlung, Berlin & Stuttgart. 191 pages. ISBN 3-443-58073-4. Price: 68 Euro.

The most recent addition to the series of monographs published in Bibliotheca Lichenologica series is a volume of the Graphidaceae. Despite the title, the book contains much more information for that family than from Australia, since specimens from many other areas, especially some of the Pacific islands, have also been studied; these are provided in the lists of selected specimens and include many new records compared to the recent *Catalogue of the lichens of the smaller Pacific islands* by ELIX & MCCARTHY (Biblioth. Lichenol. 70, 1998) for areas as Fiji, Vanuatu and especially the Solomon Islands. 129 taxa, including 127 species and two varieties, are accepted for Australia. They belong to 16 genera. No new species are described but 10 new synonymies are reported and the new combination *Platygramme mucronata* is made. All treated species are described in detail and special remarks are frequently added. In an appendix of 135 black-and-white photographs, most of the species treated are illustrated, and wherever possible type material was used for these photographs, as result of which 80 type specimens are illustrated.

The new book is without doubt a must for all who wish to determine lichens from Australia and adjacent areas and is a big step forward updating the knowledge of the family from this part of the world.

The Editor

ARVIDSSON, L. & HULTENGREN, S. (eds.) 2005. Svenska landskapslavlar. 2nd edition. Stenungsund: Naturcentrum AB. 62 pages. ISBN 91-85221-07-4. Price 15 Euro + VAT and postage (Naturcentrum AB, C.W. Borgs väg 4, SE-44431 Stenungsund)

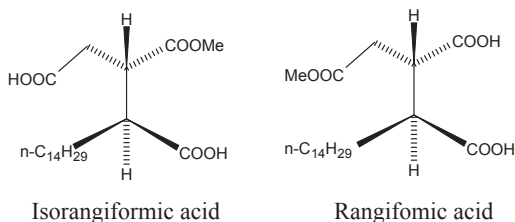
This is a remarkable book in several respects, firstly for its unusual title “Swedish landscape lichens”. The book presents a selection of one lichen representative for each of the 25 Swedish provinces starting with *Xanthoria calcicola* for the southernmost province of Skåne to *Ophioparma ventosa* for Lappland in the north. Each species is illustrated by a full-page photograph followed by one page of explanation including a small habitat photograph and a map of its Swedish distribution. This is certainly a nice idea to make a broader audience of nature lovers aware of lichens. The second very remarkable fact is that the book is not just written for the market and to earn money as it became very fashionable with nature books nowadays since the texts for the different species are in fact written by Swedish experts such as Ulf Arup, Janolf Hermansson, Fredrik Jonsson, Mats Karström and Göran Thor in addition to the editors. The text for each species starts with short citations from classical works by famous Swedish botanists and lichenologists such as G. Degelius, C. v. Linné, A. H. Magnusson, G. E. Du Rietz and J. P. Westring, followed by a description, remarks

on the importance of the selected species, including any threats, and notes on its Swedish and general distributions. The reliability of the facts given is also based by the fact that "ArtDatabanken" of the Swedish Agricultural University in Uppsala is given as editor together with "Naturcentrum AB". As it is in its second edition, the need for such a book is obvious. Thank you to authors, editors and publishers for not only a "coffee-table" book but also for a sound popular lichen book.

The Editor

DEMBICKIJ (DEMBITSKY), V. M. & TOLSTIKOV, G. A. 2005. Organiceskie metabolity lisajnikov [Organic metabolites of lichens.] – Novosibirsk: Publishing House of SB RAS, "Geo" Branch. 135 pages. ISBN 5-7692-0772-8. Price not indicated.

It is more than 50 years since the publication of Asahina and Shibata's classic "Chemistry of Lichen Substances" (Japan Society for the Promotion of Science, Tokyo 1954). The chemistry of lichen substances has much improved and the number of the compounds described increased from 82 to over 1000. V. M. Demitsky (The Hebrew University, School of Pharmacy, Jerusalem) and G. A. Tolstikov have published a short review of the known lichen metabolites. After a historical introduction (6 pages), the following groups of lichen compounds are treated in 7 chapters: aliphatic compounds (21 pp.), carotenoids, steroids, terpenoids (10 p.), depsides, depsidones, depsones (22 pp.), other aromatic compounds (11 pp.), xanthenes, dibenzofurans, chromones (8 pp.), and quinones, pulvinic acid derivatives, heterocycles (5 pp.). The structural formulae and the occurrence of 1173 compounds are given. Corresponding references (without full title) are cited at the end of each chapter; a table of contents (1 p.) and index (8 pp.) are also provided. It stands to reason that data on physical properties or syntheses or biological activities can be mentioned in only 135 pages. Unfortunately the text contains numerous misprints and errors (too many to enumerate) and obsolete species names. Formulae 137 and 138 are wrong and should be substituted by: Isorangiformic acid and Rangiformic acid (M.H. Benn et al. *Phytochemistry* 47: 1649; 1998) respectively.



The formulae of scabrosin derivatives 1135-1138 (p. 123) should be deleted; the correct structures are 1155-1159 (p. 124). The present book is a useful review of the known lichen substances intended for lichenologists and natural product chemists, but detailed work is reserved for the future.

S. Huneck

HILL, D. J. 2006. Surveying and report writing for lichenologists. Guidelines for surveyors, consultants and commissioning agencies. – British Lichen Society, London. 53 pages. ISBN 0954041879. Price 15 GBP (10 GBP for BLS members).

Contract work and consultancy offer increasing possibilities for lichenologists to make a living as official positions for lichenologists have decreased in many European countries in recent years. Such contract work certainly needs more experience than just a good knowledge of lichens. To help those involved, lichen surveyors and commissioning organisations or persons, the British Lichen Society held a two-day-workshop in Edinburgh in 2005 which was attended by 34 people. A draft of the contributions and results from this workshop are now published. It is a principal source of information for people unfamiliar with such work, but for those involved in such work the publication may not have much to offer. Nevertheless, the need for such guidelines is obvious from the good attendance at the workshop and may even increase in future with more freelance workers. Unfortunately the price is rather high for a publication of only 53 pages with one figure (illustrating the parts of the microscope).

The Editor

KASCHIK, M. 2006. Taxonomic studies on saxicolous species of the genus *Rinodina* (lichenized Ascomycetes, Physciaceae) in the Southern Hemisphere with emphasis in Australia and New Zealand. – Bibliotheca Lichenologica 93. – J. Cramer in Gebr. Borntraeger Verlagsbuchhandlung, Berlin & Stuttgart. 162 pages. ISBN 3-443-58072-6. Price: 64 Euro.

The latest monograph of *Rinodina* from the group of lichen taxonomists under the direction of H. Mayerhofer at Graz University concentrates on the saxicolous species of Australia and New Zealand and includes all known taxa from these areas. In addition to the 29 species previously known, 6 new species had to be described (2 from Australia, 4 from New Zealand); 9 species, excluded from the genus but cannot be transferred to other genera at this time, are also treated fully. Each species has a full-length description which also includes a discussion and a series of photographs illustrating the spore ontogeny, but there are no photographs of the habitus. A full list of specimens examined is given and distributions are illustrated by maps. The lists of studied specimens also include material from other parts of the World, especially the Southern Hemisphere (e.g. Chile, South Africa), but also Austria etc. The classical treatment of taxa based mainly on spore ontogeny is supported by some new characters and by phylogenetic analysis based on nuclear ITS rDNA. The new characters take account of ascospore types and pigments. Some of the classical spore types in *Rinodina* grade into other types. Regarding pigments, it was found that Bagliettoana-green is relatively common but at least 3 other pigments occur, one identified as Arcutine-yellow and two as yet unidentified. The phylogenetic analysis is based on the alignment of 71 taxa (40 from GenBank and 31 newly generated). For the convenience of users three keys are given, one for all saxicolous species of *Rinodina* s.l. in the studied area and two for Australia and New Zealand

exclusively. Some minor criticisms might be added. Some more biogeographical discussion would be of interest even at this stage of knowledge. In the introduction on page 7 it is noted that according to a paper by McCarthy one third of Australian lichen taxa are considered to be endemic – but there is no discussion of this for the species under study, nor is a comparison made between Australia and New Zealand. The first sentences in the chapter on materials and methods giving figures on studied material and the storage of voucher specimens (p. 12) are identically repeated in the summary (p. 155). With this body of information, the monograph will certainly serve its purpose and is a further important step forward in the knowledge of this large genus.

The Editor

The Secret Life of Lichens. 2006. – DVD. South Lanarkshire Council Ranger Service, British Lichen Society & Artsnet. Playing time: 6 minutes. Available from jrdouglass@hotmail.com

The Secret Life of Lichens is also the title of an exhibition prepared by the South Lanarkshire Council Ranger Service in cooperation with Scottish Natural Heritage and the British Lichen Society now touring Great Britain. The DVD was prepared as part of this exhibition and features a group of school children visiting it and exploring the world of lichens. The aim of the short scenes on topics such as *What is a Lichen*, *Lichens as Food* or *What can you do with Lichens* is clearly educational and relies on animation. From the viewpoint of a scientist, it is certainly an unusual way to look at *Lichens in Motion* played and danced by children in a workshop, but for attracting other children who might not have heard about lichens before, it could. At the same time this short video clip gives some impressions as to what can be seen in the exhibition and thus provides a good source of ideas.

The Editor

Personalia

Bernard Abbott is continuing floristic work in the Peloponnese, Greece. Copies of the current checklist are available from him on request (mailing address: Kastri, 22013, Arkadias, Greece). He will be happy to provide accomodation (but can not provide laboratory facilities), free of charge, to anyone with serious interest in the lichens of the region.

Elisabeth Baloch (PhD from Karl-Franzens-Universität Graz, Austria) is working with **Mats Wedin** in Stockholm on phylogenetic and taxonomic questions within the Ostropomycetideae, with special focus on the families Stictidaceae and

Odontotremataceae. Parts of this project is in collaboration with **Thorsten Lumbsch** and **Robert Lücking**.

Hélène Beauchamp (Geneva, Switzerland) took up a temporary position at the *Conservatoire et Jardin botaniques*. She has been working on several crustaceous terricolous genera (*Micarea*, *Bilimbia*, *Mycobilimbia* etc.) collected by Mathias Vust during his PhD on terricolous lichens of Switzerland and will soon publish a paper on the distribution of these species in Switzerland. She has been working with **Philippe Clerc** and **C. Truong** on developing a concept for the lichen exposition that will be held at the Mycorama, the new international center of Mycology that will be inaugurated in 2007 in Cernier, Neuchâtel, Switzerland (<http://www.mycorama.ch/>).

In September 2006 **Philippe Clerc** (Geneva, Switzerland) gave a course at the Humboldt Field Research Station (Eagle Hill, Maine) on the systematics of the genus *Usnea* in New England. Together with **Scott LaGreca** (London), he is preparing two papers on the *Usnea* and *Ramalina* material collected in New England during R. H. Howe Jr.'s lifetime and deposited in Howe's herbarium at Farlow (Cambridge, MA). A second account dedicated to the current *Usnea* flora of New England will be published as well. A new project *The lichen flora of Switzerland* will be launched in Geneva. The aim of this project is to produce an digitalized flora (using *Delta* and *Intkey*) that can be consulted either on the web or in the field on a small hand-held organizer such as a *Palm pilot*.

Ana Maria Millanes Romero (PhD from Universidad Complutense de Madrid, Spain) recently started on a project with **Mats Wedin** in Stockholm focussing on the evolution, phylogeny and taxonomy of heterobasidiomycetes of the Tremellales, a group with many lichenicolous representatives; in collaboration with **Paul Diederich**.

Camille Truong (Geneva, Switzerland) took up a position as a research assistant in lichenology at the *Conservatoire et Jardin botaniques* and started her PhD on the neotropical species of the genus *Usnea* under the supervision of **Philippe Clerc**. She will simultaneously work on *The lichen flora of Switzerland*.

Mathias Vust (Lausanne, Switzerland) after finishing his PhD on the terricolous lichens of Switzerland under the supervision of **Philippe Clerc**, has been working freelance on a series of small projects such as the inventories and conservation of the terricolous lichen flora in several cantons in Switzerland. He now owns his own publishing business (rossolis.ch - <http://www.rossolis.ch/>) that specializes in books on nature conservancy. *Cryptogamica Helvetica* is now sold through rossolis.ch.

Mats Wedin moved from Umeå to Stockholm during 2006, where he has taken up a personal permanent post as Senior Curator at the Swedish Museum of Natural History. In Stockholm he continues his mix of phylogenetic-evolutionary and taxonomic research on lecanoralean (s. lat.) lichens and associated fungi, with major current grants from the Swedish Research Council and the Swedish Taxonomy Initiative.

Martin Westberg (PhD from Lund University, Sweden) is working half-time in Stockholm until June, and is finalizing a project on metalliferous Acarosporaceae, in collaboration with **William Purvis** and **Anna Crewe**.

Reports

Fifth International Symbiosis Congress, Vienna

The Fifth International Symbiosis Congress, held in Vienna from the 4th to the 10th August 2006, was somewhat different from the previous Congress in Halifax because the lichen papers and posters were scattered throughout the Congress. There were no discipline related sessions. An advantage that became apparent was that lichen studies could contribute usefully in the symposia on genomics in symbiosis, integrative processes, multiple partner associations, teaching symbiosis and evolutionary implications. Those attending these or the alternate sessions were introduced to the spectrum of methods now available to study symbiotic systems and to the latest research results.

Everyone attending the congress was astounded at extra-ordinarily interesting symbioses that were presented in the session on enigmatic symbioses. Further thought provoking discussion came from the session on viral influences on symbioses. There were five oral presentations on lichens (Genetics and epigenetic of lichen associations; Analysis of selectivity and specificity in lichens; Chemical and molecular investigations into Stereocaulon; Lichen associated bacteria; and Co-evolution in lichens). There were eleven lichen-related posters on a very wide range of topics. The posters were viewed by the more than 200 delegates from 37 different countries.

In contrast to the last Congress, there was a much larger proportion of young researchers who were clearly well versed in the techniques of molecular biology and molecular genetics as well as the implications of the reported discoveries. Fruitful discussion showed the value of these newer techniques for revealing a lot about the relationships and metabolic interactions between symbiotic partners. The conference was outstandingly well organized by a team led by Monika Bright from Vienna and Douglas Zook, President of the International Symbiosis Society from Boston. Mid way through the week, there was a day-long excursion up the valley of the River Danube. In spite of rainy weather, delegates enjoyed visiting a famous monastery and a hill-top castle where we had lunch. This field trip and receptions in the Historic Vienna Town Hall and in a modern government building with floodwater swirling by, as well as the conference dinner at a vineyard, provided contrast and an introduction to the Viennese culture. Overall the Congress was voted to be very successful and most enjoyable event. The proceedings of the Congress will be published in the journal *Symbiosis*.

David H. S. Richardson, Halifax

IMC8: Cairns, 21-25 August 2006

The 8th International Mycological Congress took place in tropical Cairns in Australia. It was the first international mycology congress in a Southern Hemispherical country. More than 700 delegates from all over the world participated in the meeting; the majority from Australasia. Unfortunately, high congress fees plus the considerable travel expenses kept many lichenologists and in particular students from attending the IMC8. All in all, no more than 40-50 lichenologists participated in the meeting and lichenologically oriented symposia were for this reason very sparse.

During the five congress days 55 symposia took place, each with approximately five talks. This resulted in five simultaneous symposia, and we had to choose which symposia (or talks) to attend. However, every day a renowned mycologist gave a plenary talk on general subjects such as '*Species Concepts in Fungi*' and '*Fungal Tree of Life*' for everyone to attend. These provided good overviews on current research and progress within mycology.

Only one symposium with the title '*Lichen symbiosis: Extraterrestrial Life, Evolution and Penguin Rookery*' organised by Francois Lutzoni and Magdalena Pavlich, was specifically dedicated to lichens. A few other symposia did include lichenological contributions, e.g. general symposia about phylogeny and phylogeography, and a discussion group organised by Paul Dyer, Peter Crittenden and David Archer dealt with the progress of the *Lichen Fungal Genome Sequencing Project*. Approximately 16 posters with different lichenological topics were exhibited during the congress.

Regardless of the small number of attending lichenologists the IAL meeting took place as it usually does during the IMC. Only 24 lichenologists found their way to the meeting room on Wednesday evening. Ernie Brodo welcomed us warmly in the world of mycology and guided the way through appointed days, announcements, and awards. The Acharius Medal was awarded to Prof. Mark Seaward, and the Mason Hale award was given to Dr. Silke Werth for her outstanding Ph.D. thesis. After the IAL meeting we went out for a nice dinner and drinks, enjoyed the company of lichenologists, and the pleasant tropical night outside.

However, in our opinion lichenology in general was extensively underrepresented at the IMC8. Compared to previous conferences we have participated in, we were rather disappointed not to find the same level of interest in what other people were working with, and we particularly missed the warm feeling of being welcome in the community that we experienced particularly at the IAL conference. Nevertheless, a general mycology meeting has the advantage of learning or updating one's knowledge in many other fields of mycology.

The organizers of the IMC8 and everybody involved with practicalities did a very fine job, and the Cairns Convention Centre provided a very modern and efficient infrastructure. The congress dinner was well organized and took place in the interesting settings of the Tanks Art Centre. The food was good (although vegetarians were served salad twice!) and provided by the renowned Red Ochre Grill. However, the price for attending was very high, hence a lot of people were missing, and the entertainment after dinner was not quite adequate.

Cairns had a lot to offer during the time not spent attending symposia: first and foremost of course the Great Barrier Reef, which was absolutely amazing! But also the hinterland, with nearby rainforests, beautiful beaches and the Tablelands offered a range of very interesting tours and hikes. The town itself featured plenty of dinner opportunities in the evenings, and a range of pubs, nightclubs etc. were available for those interested. At the night market you could buy almost any kind of knick-knacks and souvenirs ranging from boomerangs, didgeridoos and crocodile teeth to kangaroo fur purses and koala bear soft toys, doubtless Australia's most famous attributes.

Rikke Reese Næsborg, Uppsala & Nora Wirtz, Frankfurt/Main

IAL excursion, Cairns 18-20 August 2006

The 8th International Mycological Congress (IMC8) took place in Cairns, Northern Queensland, Australia on 20-25 August 2006. A two-day pre-congress lichen tour, followed by one day at a James Cook University laboratory to identify the collections, was also organized. The lichen tour provided a pleasurable opportunity for lichenologists from all over the world to meet and spend a few days together exploring the lichen flora of the Cairns hinterland. The practical arrangements were undertaken by a local mycologist, Sapphire McMullan-Fisher; on behalf of all the participants we would like to thank her for a perfectly organized excursion during which we were able to experience different vegetation types ranging from coastal to highland tropical rainforests, and the drier sclerophyll forests and woodlands of the Atherton Tablelands.

Our first meeting took place in the evening before the excursion at the Mondo Café Bar & Grill in Cairns. This provided an opportunity for the participants to meet and get some last-minute practical information about the tour. During the evening, we were joined by Betsy and Mick Jackes, two local botanists who were our guides on the tour.

The following morning our patient bus driver, Roland, made a tour all around Cairns to find and pick up the participants. Excited to visit new places (some of us had in fact never been in the tropical rain forest before), and looking forward to collecting lichens, we drove through areas of sugarcane, coffee and tea plantations to reach our first stop at Henrietta Creek. Although the first stop was short, and time for collecting was limited due to the intensive program, it was sufficient to realize at a glance the high lichen diversity in this environment. Visits to the Millaa Millaa Falls and the impressively deep crater in Mt Hypipamee National Park followed in the afternoon. After a long day in the field, one more highlight remained: the original Malanda Hotel where we stayed over night is timber-built and more than 100 years old, with wood panelled walls, cosy rooms and a genuine atmosphere. Unfortunately words alone cannot render a true picture of it. The lavish Australian-type dinner restored our strength, and in the evening many of us gathered in Irwin and Fenja Brodo's room and spent a couple of hours looking at the samples we collected that afternoon, trying to find names for some of them.



Field trip participants. Back row, left to right: Kojiro Hara, Cécile Gueidan, Jan-Eric Mattsson, Rikke Reese Næsborg, Patricia Harrison, Alexandra Robeck, Heath O'Brian, Betsy Jackes, Ernie Brodo. Front row, left to right: Yoshikazu Yamamoto, Kanae Takahashi, Lucia Muggia, Evgeny Davydov. Missing from picture: Håkan Lättmann, Filip Högnabba, Fenja Brodo, Mick Jackes.

After a short visit at the Malanda markets in the early morning of the second day, the tour continued towards Lake Eacham. Thereafter we visited the famous curtain fig tree, an impressive representative of the strangler figs found in these tropical rainforests. As the time flew so fast we soon had to continue our journey. After a couple of stops in the drier Kuranda Range collecting from trees and soil among impressive termite nests, we soon reached the Cedar Park Tourist Centre, where no one will forget the delicious barramundis that were served for lunch. After the lunch, a short walk in the wild forest gave us a chance to do some more collecting, and experience once more the hardly penetrable rain forest vegetation with prickly spines often present along the path. Some of us were also lucky to observe spectacular lizards. The last stop of the day was made near Kuranda, in the Barron Gorge National Park, where the spectacular Barron Falls could be viewed.

The third day at James Cook University was spent determining the collected material and preparing the specimens for the Cairns and Brisbane herbaria. Naturally, it would have been necessary to spend more than one day at the microscopes to properly identify all the lichens, but the congress was about to start offering new opportunities to exchange ideas, opinions and discoveries related to the enormous fungal kingdom. Although some of the material therefore remains unnamed, we are hopeful that it will be determined sometime in the future.

We would like to thank our two guides Betsy and Mick Jackes for their company and the knowledge they shared with us during the trip. With decades of experience

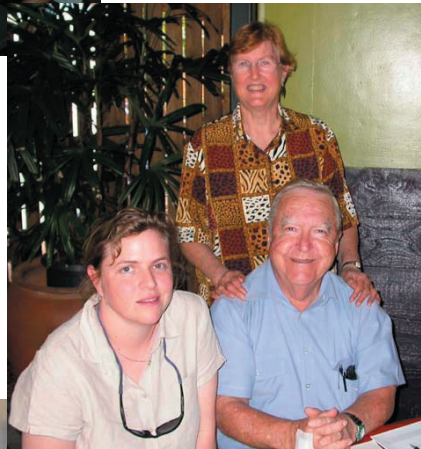
in the wet and dry tropics, they led us through several diverse localities; their wide knowledge, not only of the local flora but also of the history of the region was valuable and gave the participants a broad insight of the Far North Queensland. We are also most grateful to Irwin Brodo who took the initiative in arranging the excursion and for his support in the field.

Lucia Muggia & Filip Högnabba



◀ In lab at James Cook University. Left to right: Heath O'Brien, Håkan Lättman, Ernie Brodo, Evgeny Davydov, Rikke Reese Næsborg

Field trip leaders: Left to right: Sapphire ▶ McMullan-Fisher, Betsy Jackes, Mick Jackes.



◀ Studying lichens at Malanda Hotel in evening. Clockwise: Håkan, Lucia, Yoshikazu Yamamoto, Kanae, Ernie, Rikke

Promoting interest in lichenology – a responsibility for all of us

The issue of promoting lichenology is of general concern for all lichenologists, but it is at the same time a delicate and complex matter as we all have diverse interests and scientific inclinations. How do we cope with this while maintaining that lichenology should remain a highly diversified activity for the scientific community as it has been for decades? This question was highlighted by the recent International Mycological Congress (IMC8). I was uneasy about most of the presentations: although the majority provided good and understandable reports of mycological research, they diminished rather than encouraged further interest.

Compared with my experiences from a dozen scientific conferences of similar size during the last 20 years, I was conscious of a shift in the content and structure of the presentations as well as in the communicative climate of the sessions. In former years, general reports from meetings and excursions, theoretical investigations, interpretations of field observations, reviews and reports from experiments, as well as data collected from the laboratory and field were presented in a way everyone could enjoy. As I recall, this resulted in dialogues, discussions and debates that generated new questions and topics for further studies.

In our lichenological world we are in a rather unique situation as the scientific disciplinary borders are less pronounced than in other fields of biology. However, this characteristic may be vulnerable and needs to be protected.

Lichenology as a science

At present, we focus mainly on presenting results and facts combined with simplified, often well known, textbook information together with detailed methodology. Usually this is combined with complicated PowerPoint presentations, which assume it is possible to communicate the full content of a scientific paper in 20 minutes to an audience expected to be able to listen, read, and interpret figures and diagrams simultaneously. Our attempt to include details of our web sites, show our own posters and those of our students, include details of everyone involved in the study is time consuming. At the end of the presentation, there is usually only time for one or two relatively simple questions rather than an opportunity for discussion and dialogue.

A congress is one of many opportunities for students to become more deeply involved in lichenology, but this is not its main objective. It should reflect what is going on in the world of lichenology and provide an opportunity for scientific exchange and development. If my observations from IMC8 are accurate, then the uniformity of the presentations reflects the conformity of the research. The notes above mainly concern the structure of the presentations, but there are also considerable similarities in their content. Primary data are collected and presented, but rarely converted or developed into knowledge. The size of the data sets obtained seems to be more important than the information that could be, but rarely is, extracted from these. This leads to a situation where discussions on presented papers are virtually impossible; there is only an opportunity for questions about procedures or short comments. A necessary condition for dialogue and scientific development is formulated descriptions and

hypotheses within theoretical frameworks, something that seems to be more or less forgotten today.

IMC8 was a reflection of the global mycological scientific situation. Mainstream research produces endless sequences of A, C, G and T and forests of trees representing phylogenetic hypotheses without clear objectives, theoretical frameworks, or a clear philosophical or scientific basis. This lack of plurality in research in general and in biological thinking in particular is, according to many researchers, a question of funding and a funding body's focus on "strong" (read: mainstream) research groups. Most of us appear to be manipulated by those who fund us, doing what they ask rather than something scientifically more productive. As a result, students are offered more or less purely technical tasks instead of intellectual challenges as subjects for their theses. At IMC8 there were complaints that almost nobody utilised the 30 already fully sequenced prokaryotic genomes while at the same time people were urged to participate in projects aimed at sequencing yet more species. I saw a similar statement a few years ago from one of the pioneers of DNA research who was looking forward to the completion of the mapping of the human genome so that he could return to basic biological questions.

It is not easy to deal with this situation, but obviously something must be done. During a course for PhD students (report in last issue of IAL Newsletter) most of the lecturers shared the same experience. They all had problems with funding, particularly their PhD projects, possibly because their research was not considered as mainstream. It was also pointed out how competition at the frontier of mainstream research resulted in great efforts to reach quantitatively large but similar results while a diversion of resources stimulated research over wide areas resulting in a more divergent production and inspiration for new fields of investigation. It is not only a total waste of resources, but also demoralising for those concerned, to subject those with a high intellectual capacity and ability for abstract theoretical analysis to do routine work in a laboratory or on a computer, especially when they would like to do something else. This work is necessary but should preferably be carried out by someone who is dedicated to that type of work.

The social structure of scientific communities

Yet another problem is the complex social organisation within the scientific community. Most of the research is conducted in more or less formal groups and it has probably been so for more than a century, although many earlier groups were more informal and not spatially concentrated. When we try to encourage students to become involved in lichenology we have a tendency to focus on finding subjects of interest for the individuals rather than encouraging them to join existing groups. To make this possible these groups need to be visible, as at scientific congresses. At IMC8, only 20 lichenologists participated and only about one third of these could be regarded as senior scientists contributing to the continuity and stability of the lichenological community. Both the total number and the number of established lichenologists was well below that necessary to achieve a critical mass where

everybody can find specialist groups of people at different events for personal and scientific exchange of opinions and for network creation. Those of us who have more or less permanent positions and some degree of financial support etc. have to take on responsibility and participate in events even if we are not presenting new and interesting results. It is probably the only possibility for younger students to make personal contact with more than two or three professional lichenologists at one time. Simultaneously it gives the established researcher the possibility to grapple with new questions and perspectives.

Suggestions

Teaching and research

Since lichenology is a human activity, it should be promoted by specific social arrangements. Social networks are primarily created and maintained through personal communication between individuals, by participation in events or by acknowledged membership in the scientific community. Thus, to promote lichenology the following need to be considered:

- Create social contexts where students may become involved
- Include scientific research activities in teaching to create real hands-on situations, both scientifically and socially
- Always try to include non-mainstream research in your teaching presentations or research activities – otherwise we may only attract students with narrow interests.

Congresses and other scientific meetings

- At international botanical or mycological congresses there should always be at least 5 symposia and at least 3 workshops, discussion groups or other meetings related to lichenology. Everyone should be responsible for providing suggestions to the organizing committees. A similar strategy could be adopted for meetings at a regional or local level.
- Maximize the number of active participants in congresses and symposia. Try to let representatives from all different working groups hold oral presentations in order to increase the number of participants in discussions. One way to give more people this possibility is for conveners or chairs to try and create communicative situations instead of giving presentations themselves. Stimulating discussions is as important as presenting results.
- Keep your own costs down and charge students low fees to participate. Try to include student participation in the budget of research projects. Make grants available to facilitate student participation.

As lichenologists we have an almost unique situation in the scientific world as we are aware of the richness of the subject that transcends disciplinary borders. Lichenology is a vulnerable discipline and should be nurtured.

Jan-Eric Mattsson

New theses presented by their authors

Rita Ketner-Oostra. 2006. Lichen-rich coastal and inland sand dunes in the Netherlands: vegetation dynamics and nature management. PhD thesis. Wageningen University, Wageningen, The Netherlands. 208 pp. ISBN 90-8504-514-2. Price 25 Euro (including postage). Available from: rita.ketner-oostra@wur.nl

This thesis describes long-term changes in the lichen-rich dry grassland communities in calcium-poor coastal and inland dunes in The Netherlands. The vegetation of the Terschelling dunes prior to 1970 and after 1990 is compared, as is that of the inland Kootwijkerzand dune area. Some of the changes that have occurred since the 1970s are due to natural succession, but others have resulted from human-induced eutrophication, through increased aerial inputs of nitrogen (mainly ammonia) since the 1970s, and acidification. Large areas of these dunes are dominated by grasses or mosses. The decline of lichens in both dune areas has also resulted from the invasion of the moss *Campylopus introflexus*, an alien species from the southern hemisphere that is adapted to bare acid sand, produces considerable humus and speeds up succession.

Another topic covered in this thesis is the evaluation of small- and large-scale management, such as EGM management (effect-oriented measures against acidification and eutrophication) in both these coastal and inland dune areas in the early 1990s. Recommendations are given for future restoration management to maintain or regain biodiversity. Burning or removing the canopy is ineffective in regaining biodiversity as long as the N emission greatly exceeds the critical deposition values for these vegetation communities. The crucial factor to assure the restoration of the former lichen-rich sand-dune communities seems to be the input of wind-blown sand.

Editorial remark

As it is difficult to overlook recently finished theses especially from other countries and outside the field of taxonomy we invite all people who finished their theses to contribute summaries for further issues of the newsletter.

The Editorial Board

REVIEWS

Lichenological Journals 4: *Aktuelle Lichenologische Mitteilungen*

P. Scholz

This series of newsletters was produced from the active group of lichenologists at the University of Essen under the aegis of Benno Feige who held the chair of botany until 2003. The first series was issued under the name of *Bryologisch-lichenologische Arbeitsgemeinschaft für Mitteleuropa*, but since there was no parallel series for bryology, a new series (Neue Folge, NF) was published as a private initiative by the same group from 2000 onwards. The original production was by G. B. Feige and H. T. Lumbsch, but in later years A. Aptroot, E. Heibel, M. Jensen, K. Linke (later K. Roth), R. Kricke and F. Schumm shared this work.

The content is mainly what would be expected from a regional newsletter: announcements for and reports about excursions and symposia, personalia, book reviews, lists of new literature on lichens of Central Europe, and some curiosa; but there are also some floristical papers and a series on recent lichenology at various institutions called *Arbeitsgruppen stellen sich vor*. For those interested in the history of lichenology, it should be noted that several issues were devoted to important lichenologists or provide biographical information on special occasions; such contributions often contain portraits, considerable biographical data and lists of publications. Issue 11 of the new series differs from all others in being a facsimile reprint of *Wagner, H.; Führer ins Reich der Cryptogamen für Lehrer und Schüler. III. Die Flechten, dargestellt durch 25 Arten derselben. Bielefeld: Verlag von A. Helmich* which also contains 25 specimens in the manner of exsiccati.

Issues published:

Aktuelle Lichenologische Mitteilungen der Bryologisch-lichenologischen Arbeitsgemeinschaft für Mitteleuropa

1 (1992) 12 pages	9 (1995) 18 pages
2 (1992) 11 pages	10 (1995) 12 pages
3 (1993) 12 pages	11 (1995) 15 pages
4 (1993) 16 pages	12 (1996) 36 pages
5 (1994) 55 pages	13 (1996) 20 pages
6 (1994) 21 pages	14 (1997) 14 pages
7 (1994) 11 pages	15 (1997) 30 pages
8 (1994) 19 pages	16 (1998) 32 pages

Aktuelle Lichenologische Mitteilungen, Neue Folge

NF 1 (2000) 35 pages	NF 8 (2002) 27 pages
NF 2 (2000) 18 pages	NF 9 (2002) 33 pages
NF 3 (2000) 28 pages	NF 10 (2003) 42 pages
NF 4 (2000) 22 pages	NF 11 (2003) 61 pages
NF 5 (2001) 37 pages	NF 12 (2004) 41 pages
NF 6 (2001) 41 pages	NF 13 (2004) 35 pages
NF 7 (2001) 23 pages	NF 14 (2005) 36 pages

The lichenological activities of the following institutions (universities unless otherwise indicated) or societies are reported (issue numbers given in brackets):

Berlin, University (4), Berlin, Botan. Mus. (15; NF 5), California Lichen Society (NF 6), Düsseldorf (2), Essen (11), Graz (8), Hamburg (5), Kiel (16; NF 2), Köln (1), Mittelhess. Lichenol. Arbeitskreis (9), Münster (3), Niederlande (NF 1), Regensburg/Neumarkt (7), Salzburg (13), St. Petersburg, Komarov Institute (6), Slovak Botan. Soc.: Lichenol. Working Group *Cladonia* (NF 5)

Special biographical information is provided for the following lichenologists (*bibl* = bibliography, *bio* = biographical data and *pict* = portrait):

Culberson, W. L. (NF 10), Feige, G. B. (NF 12: *bibl, bio, pict*), Huneck, S. (5: *bibl, pict*), Lange, O. L. (15: *bibl, bio, pict*), Leuckert, C. (9: *bio*), Llano, G. A. (NF 10), Peveling, E. (5: *pict*), Poelt, J. (10), Santesson, R. (12), Schindler, H. (14: *bibl., bio, pict*; NF 1), Ullrich, H. (16: *bibl, bio, pict*), Vězda, A. (11)

Editorial Remark

Since several smaller lichenological journals have appeared irregularly and are often difficult to cite, or rarely to be found even in large libraries, it is recommended that detailed lists together with some historical remarks, as provided above, are featured for other journals in forthcoming issues of the IAL Newsletter and therefore contributions to this subject are invited.

Back issues of ILN

The following back issues of ILN are still available: 9(1), 9(2), 10(1), 10(2), 11(1), 11(2), 12(1), 12(2), 13(1), 13(2), 14(1), 14(2), 15(1), 15(2), 16(1), 16(2), 17(1), 20(1) and further issues. Photocopies are available of: vol. 1(1), 1(2+supp.), 1(3), 2(1), 3(2), 6(2), 7(1–2), 8(1–2). Two indexes are also available: Index to vol. 1–8, Index to vol. 9–13.

According to a resolution of the IAL Executive Council, published in ILN 16(1), April 1983, the following charges will be levied for back issues of ILN: Vol. 1: 0.25 USD per issue (3 per volume); vol. 2–8: 0.50 USD per issue (2 per volume); vol. 9–13: 1.00 USD per issue (2 per volume); vol. 14–17: 1.50 USD per issue (2 per volume). Back issues from vol. 20–29 are available for 1.00 USD each (3 per volume). The Indexes are free. New members will only receive free copies of the numbers constituting the volume issued for the calendar year in which they join IAL.

Orders for vols. 1–29 should be sent to H. Sipman, Botanischer Garten & Botanisches Museum, Königin-Luise-Straße 6–8, D-14195 Berlin, Germany, fax: (+49)-30-84172949, e-mail: h.sipman@bgbm.org. For later issues contact the Editor.

Lichens-I is the official mailing list of IAL. You can subscribe by sending an e-mail to listproc@hawaii.edu with the message “SUBSCRIBE LICHENS-L YourFirstName YourLastName”.

The official web page of IAL is

<http://www.lichenology.org>

The cover-page illustration

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List of Societies

- Australasia:** Australasian Association for Lichenology. Info: W. M. Malcolm, Box 320, Nelson, New Zealand. Phone & fax: (+64) 3-545-1660, e-mail: nancym@clear.net.nz
- Brazil:** Grupo Brasileiro de Liquenólogos (GBL). Info: Marcelo P. Marcelli, Instituto de Botânica, Seção de Micologia e Lichenologia, Caixa Postal 4005, São Paulo – SP, Brazil 01061-970. Fax: (+55)-11-6191-2238, phone: (+55)-11-5584-6304 (inst.), 218-5209 (home), e-mail: mmarcelli@sti.com.br
- Central Europe:** Bryologisch-lichenologische Arbeitsgemeinschaft für Mitteleuropa (BLAM). Contact: Felix Schumm, Mozartstr. 9, D-73117 Wangen, Germany, e-mail: fschumm@online.de, web page: www.BLAM-ev.de
- Czech Republic:** Bryological and Lichenological Section of the Czech Botanical Society. Info: Jiří Liška, Institute of Botany, Academy of Sciences of the Czech Republic, CS-252 43 Pruhonice, Czech Republic, e-mail: liska@ibot.cas.cz, web page: botanika.bf.jcu.cz/BLS/english/index.html
- Finland:** Lichen Section, Societas Mycologica Fennica. C/o: Botanical Museum (Lichenology), P.O. Box 47, FIN-00014 Univ. Helsinki, Finland. Info: Teuvo Ahti, phone: (+358)-9-7084782, fax: (+358)-9-7084830, e-mail: teuvo.ahiti@helsinki.fi
- France:** Association Française de Lichénologie (AFL). Info: Damien Cuny, Laboratoire de Botanique, Faculté de Pharmacie, 3, rue du Professeur Laguesse, BP 83, 59006 Lille Cedex. Phone (+3)-209-64040 poste 4289, fax (+3)-209-59009, e-mail: damien.cuny@wanadoo.fr, web page: perso.orange.fr/floragis/AFL/en/index.htm
- Great Britain:** The British Lichen Society (BLS). C/o: Department of Botany, The Natural History Museum, Cromwell Road, London SW7 5BD, UK. Info: Pat Wolseley, phone: (+44)-20-7942-5617, fax: (+44)-20-7942-5529, e-mail: bls@nhm.ac.uk, web page: www.theBLS.org.uk
- Italy:** Società Lichenologica Italiana (SLI). C/o: Museo Regionale di Scienze Naturali di Torino, v. Giolitti, 36, I - 10125 Torino. Info: Stefano Loppi, Dipartimento di Science Ambientali “G. Saratti”, Sezione di Ecologia e Sistematica Animale e Vegetale, Unità di Ricerca di Lichenologia, Università degli Studi di Siena, Via P.A. Mattioli 4, I-53100 Sienna, phone: (+39)-0577-232869, fax: (+39)-0577-232896, e-mail: loppi@unisi.it, web page: <http://dbiodbs.univ.trieste.it/sli/home.html>
- Japan:** The Japanese Society for Lichenology (JSL). Info: Yoshikazu Yamamoto, Secretary of JSL, Akita Prefectural University, Shimoshinjo-nakano, Akita, 010-0195 Japan, fax (+81)-18-872-1678, e-mail: yyamamoto@akita-pu.ac.jp, web page: www.lichen.akita-pu.ac.jp/jsl/index.php?ml_lang=en
Lichenological Society of Japan (LSJ). Nobuo Hamada, Secretary of LSJ, Osaka City Institute of Environmental Sciences, Tojo 8-34, Tennoji, Osaka 543-0026, Japan, e-mail: MXI00715@nifty.com, web page: home.hiroshima-u.ac.jp/lichen/lsj-e.html

- The Netherlands:** Dutch Bryological & Lichenological Society (Bryologische + Lichenologische Werkgroep, BLWG). Info: Dick Kerkhof, e-mail: info@blwg.nl, web page: www.blwg.nl
- Nordic Countries:** Nordic Lichen Society (Nordisk Lichenologisk Förening, NLF). Info: Ulrik Sochting, Dept. of Mycology, Botanical Institute, Ø. Farimagsgade 2D, DK-1353 Copenhagen; phone: (+45)-3532-2313, fax: (+45)-3532-2321, e-mail: ulriks@bot.ku.dk, web page: www.uib.no/bot/nlf/index_NLF.htm
- North America:** American Bryological and Lichenological Society, Inc. (ABLS). Info: Dr. Robert S. Egan, Department of Biology, University of Nebraska at Omaha, Omaha, NE 68182-0040; e-mail: regan@mail.unomaha.edu, web page: www.abls.org or www.avalon.unomaha.edu/~abls
- North America, Northwest:** Northwest Lichenologists (NWL). Info: Bruce McCune, 1840 NE Seavy Avenue, Corvallis, Oregon 97330 USA. E-mail: Bruce.McCune@science.oregonstate.edu, web page: www.nwlichens.org (To get on the e-mail list, follow the links from <www.nwlichens.org>)
- North America, California:** The California Lichen Society (CALs). P.O. Box 472, Fairfax, CA 94930, U.S.A. Info: Janet Doell, e-mail: rdoell@sbcglobal.net, web page: ucjeps herb.berkeley.edu/r/moe/cals.html
- North America, East:** Eastern Lichen Network. Info: Marian Glenn, fax: (+1) 973-761-9772, e-mail: glenmmar@shu.edu, web page: www.nybg.org/bsci/lichens/eln/
- South America:** Grupo Latino Americano de Liqueólogos (GLAL). Info: Susana Calvelo, Centro Regional Universitario Bariloche, Universidad Nacional del Comahue, Bariloche- 8400, Río Negro, Argentina; phone: (+54) 944-23374 or 28505, fax: 62215 or 22111, e-mail: scalvelo@crub.uncoma.edu.ar
- Poland:** Lichenological Section of the Polish Botanical Society. (Polskie Towarzystwo Botaniczne). C/o: Krystyna Czyzewska, Department of Algology and Mycology, University of Lodz, Banacha 12/16, 90-237 Lodz, Poland, e-mail: czyzew@biol.uni.lodz.pl; Info: Urszula Bielczyk, Institute of Botany, Polish Academy of Sciences, Lubicz 46, 31-512 Krakow, Poland, phone: (+48) 12-4241768, fax: (+48) 12-4219790, e-mail: bielczyk@ib-pan.krakow.pl
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- Sweden:** Svensk Lichenologisk Förening (SLF). Info: Per Johansson, Inst. f. Naturvårdsbiologi, SLU, Box 7002, 750 07 Uppsala, Sweden. Email: Per.Johansson@nvb.slu.se
- Switzerland:** Association Suisse de Bryologie et Lichénologie (BRYOLICH). Info: Silvia Stofer, WSL, Zuercherstrasse 111, CH-8093 Birmensdorf. E-mail: stofer@wsl.ch, web page: www.bryolich.ch

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