ASSOCIATION NEWS

Message from the President

I accepted the new responsibilities of President of the I.A.L. with considerable hesitation, following, as I am, in the footsteps of Pier Luigi Nimis, a most extraordinary person. He has guided the I.A.L. with imagination, energy, wisdom and his unique sense of humour, for the last four years in a way that few would be able to duplicate ... certainly not me. The entire I.A.L. Council was active throughout this period by participating in all the decision-making necessary for keeping the Association alive and relevant. Special thanks go to our hard-working Secretary, Leo Sancho; our Treasurers, François Lutzoni and Christoph Scheidegger; and Members-at-Large, Jack Elix, Rosmarie Honegger, and Gintaras Kantvilas for their work and ideas throughout that period, and, of course, Tina Randlane, the IAL5 organizer who not only did such an extraordinary job with the Tartu meetings, but participated fully in other Council business. Martin Grube has done a marvelous job with the International Lichenological Newsletter, as well as creating and maintaining our official web page. And let me not forget to mention Cliff Smith, who continues to monitor and maintain our vital Internet link, "lichens-l," the lichenological list-server and who created our original web page.

We have another good Council for the coming four year period. I am very fortunate indeed to have Christoph Scheidegger as my Vice-President. Einar Timdal is our new Secretary, and the Treasurer is Ulrik Søchting assisted by Jim Lawrey in North America. Tom Nash will serve on the Council as the next IAL meeting organizer, and our other Members-at-Large are Franc Batič, Richard Beckett and Isabel Martínez. Peter Scholz has taken on the job of editor of the Newsletter. You can be sure that all of us will endeavour to keep activities in lichenology moving and progressing as efficiently as we can. You will find our contact information in this issue of the Newsletter, so please don't hesitate to contact any one of us with your concerns and ideas relating to lichenology.

We are already working on a new (single) web page for the I.A.L., and your ideas about what should be included or excluded would be welcome. The various awards that the I.A.L. bestows at various international scientific gatherings are being considered as before. Nominations for any of these awards are always regarded seriously.

The I. A. L. Newsletter, whether it remains a "hard-copy" journal or becomes another downloadable magazine from cyberspace, will continue to play a vital role in keeping us informed about each other's activities, travels, awards and interests. It can only serve these purposes if we contribute news to the new editor, Peter Scholz, so please keep him informed about your activities, new students and projects, and so on. Such news not only informs but makes us feel more like "family."

I look forward to serving as your President until the next I.A.L. meeting (in California in 2008) and hope to see many of you there, if not before.

Irwin (Ernie) Brodo

It is time to pay your IAL dues, if you have not already done so

At the General Meeting at IAL5 in Tartu it was decided to keep the dues for the next period unchanged, viz.: 40 US $ for 2005-2008. This is equivalent to 30 €.

You can either make a bank transfer to one of the accounts mentioned below, or you can mail a check or money order payable to the "International Association for Lichenology" to one of the treasurers. You are kindly requested to make sure that all charges related to the money transfer or to cashing of the checks are paid by the sender. For checks or money orders in € please add 10 €. For checks or money orders in US$ please add 10 $.

Dues to the Danish account must be paid in € (30 €); dues to the US-account must be paid in US$ (40 $). In case of doubt, please contact the treasurer (ulriks@bi.ku.dk).

The following accounts are available:

Ulrik Søchting, treasurer. Biological Institute University of Copenhagen O. Farimagsgade 2 D DK-1353 Copenhagen K. Denmark Email: ulriks@bi.ku.dk	James D. Lawrey, assistant treasurer Department of Environmental Science and Policy MSN 5F2 George Mason University 4400 University Drive Fairfax, Virginia 22030-4444, U.S.A. Email: jlawrey@gmu.edu
IAL Account nr.:3113465204 Reg. 3113. Iban number: DK2430003113465204 Danske Bank, Norre Afdeling Frederiksborggade 11 DK-1360 Copenhavn K Swift code: dabadkkk	

IAL 5 (Tartu, Estonia, 16.-21. August 2004)

As a PhD student I would like to give a short account on my impressions of the 5th IAL symposium "Lichens in Focus" in Tartu, Estonia.

After a day in the beautiful medieval capital city Tallinn, a 5-day pre-symposium excursion through Estonia was undertaken by 23 participants, guided by very friendly and competent Estonian red caps who took great care of us. The fieldwork, bus drives and dinners provided ample opportunity for us to get to know one another. Most scenic sites of our travels were the islands Saaremaa and Hiiumaa, with its Alvars, lichen-rich pine forests and untouched bogs.

The conference, attended by 245 participants from 35 countries, took place in the Vanemuise Concert Hall in Tartu. The programme was composed of oral presentations, discussions and poster sessions. Due to the fact that all oral and discussion sessions took place in the same hall, every participant was able, as well as obliged, to share in the whole

spectrum of lichenological research. Although many contributions were concerned with phylogenetic investigations, a wide range of other topics was covered including diversity, ecology, monitoring and photobionts. The presentations gave an essential overview of present research in lichenology, but it became clear that much more work needed to be done to deal with many aspects of lichenology.

I was impressed by the exceptional cooperative and helpful atmosphere between the participants: students who visited an IAL Symposium for the first time were able to discuss on the same level with experienced lichenologists, and future collaborative information exchange and teamwork were established. Numerous contributions made clear that this had worked very well in the past. The good atmosphere is underlined by the fact that a few participants at the conference and/or on the excursions were not lichenologists, but family members on holiday.

In the evenings, small groups of lichenologists rushed into the city for dinner in order to reunite into larger groups in a handful of preferred pubs, which were occupied sometimes far into the night. Often praised, and rightly so, was the perfect organisation of the symposium by the Estonian crew most ably directed by Tiina Randlane.

Thilo Hasse, Münster

New Acharius medallists

Jack Elix

Today we celebrate the lichenological accomplishments of a prominent oenophile and good friend, John A. Elix, who grew up in the South Australia wine country. Rather than training in the botanical or fungal arena, Jack was formally trained in organic chemistry (B.Sc. and Ph.D. Adelaide; post-doctoral years at the University of Cambridge and D.Sc. in natural products chemistry at the Australian National University). He started his professional career as a lecturer in chemistry at the Australian National University in 1967 and subsequently became a full professor in that department. At Cambridge Mel Sargent, a colleague and friend of Jack's, was working on the structural confirmation of averantin and other lichen anthraquinones and it was at this time he first became interested in these organisms. In 1969 Jack attended a lichenology course in the Botany Department at ANU given by Eilif Dahl. He joined Eilif in several field excursions and became 'hooked' on these organisms. Eilif was also responsible for introducing Jack to Syo Kurokawa.

Given the emerging importance of lichen secondary metabolites to the systematics of lichens through the work of Asahina, the Culbersons and others at the time of Jack's introduction into lichenology in the late 1960s, it was appropriate that he became interested in lichen secondary metabolites. With his chemical background, he had a distinct advantage, as he could interpret mass spectra print outs or nuclear magnetic resonance outputs, as readily as most lichenologists can interpret TLC plates. His access to sophisticated chemical techniques allowed him, his students and colleagues to elucidate the chemical structure of well over 250 lichen secondary metabolites, often with validation through synthesis investigations, and thereby advancing our knowledge of these lichen secondary metabolites by at least 50%. In the process of conducting these investigations, he built a library of authentic standards of secondary metabolites, which he readily shared

with many lichenological colleagues. These standards allowed Jack to provide a singular service to many of us by providing authoritative determinations of our unknowns. With his students and colleagues, he developed the first computer based program for analyzing our TLC plates, and he subsequently perfected the use of HPLC for the determination of lichen secondary metabolites, and taught these techniques to his colleagues. These achievements and service alone would merit the awarding of the Acharian medal to Dr J.A. Elix by the International Association of Lichenology.

In addition to his chemical research, Jack has become a lichen systematist of extraordinary skill, who has now published over 450 new species. In collaboration with Kurokawa he published in the early 1970s his first papers on Australian Parmeliaceae on species now placed in *Xanthoparmelia*, and by the late 1970s he had published his monograph, on the Australasian *Hypogymniae*. For many years he collaborated extensively with the late Mason Hale bringing the systematics of the Parmeliaceae, the largest family of the lichenized fungi, into much sharper focus. Since Mason's death in 1990, Jack has been the world's primary expert on the Parmeliaceae with a focus in recent years on collaborating with Ana Crespo and colleagues on molecular investigations in the family. Through his industry many of the major genera (*Paraparmelia, Pseudoparmelia, Psiloparmelia, Relicina*) in that family have now been monographed at the world level. In addition, many major revisions have been published at the continental scale (e.g. *Xanthoparmelia* for Australasia and later South America; most of the Parmeliaceae for Australia in Vol. II of the Australia Flora, and *Hypotrachyna* for the Flora Neotropica [in ed.]). Through his efforts in obtaining research money, conducting research on his own and nurturing the efforts of younger colleagues, Jack has been one of the primary forces behind the inclusion of lichens in the Flora Australia project, that now includes four major volumes. Broad interest in the Australian lichen flora has led Jack to investigate many other lichen groups outside of the Parmeliaceae, including *Amphorothecium, Buellia, Cladia, Kantvilasia, Labyrintha, Lecanora, Myeloconis, Myelorrhiza, Pertusaria, Physma, Physcidia, Ramboldia, Siphulella, Strigula*, and *Tasmidella*, several of which were newly described genera to science. Furthermore, his regional focus on Australia has been ever expanding to major investigations, initially with his good friend and collecting partner Heinar Streimann in Papua New Guinea, and subsequently in collaboration with students and colleagues throughout Oceania and SE Asia.

Thomas H. Nash III, Tempe

Ludger Kappen

Professor Ludger Kappen is a terrestrial ecologist, a botanist and a lichenologist. That is why most of his lichenological work is embedded in his general research interest: ecology and ecophysiology of plants.

Ludger was born in 1935. He studied Biology in Freiburg and Göttingen. He achieved the promotion as a Dr rer.nat. at the University of Göttingen and he was granted his habilitation in 1974 at the University of Würzburg. After being a scientific assistant of Prof. Otto Lange and docent at this University, Kappen went to the University of Kiel in 1981 when he became a full Professor position. In Kiel he was permanent Director of the Botanic Institute and the Botanical Garden, and Chairman and Director of the Polar Institute.

Ludger can be considered one of the first who laid the basis for our modern understanding of functions and adaptations of lichens in their habitats. He began his academic career with an investigation of the tolerance to freezing, heat and desiccation stress in the sporophytes and gametophytes of European Polypodiaceae. Later he investigated the CO_2 exchange in lichens and the influence of major environmental parameters. He always used the highest technical standards for his instrumentation and stimulated the interdisciplinary cooperation to address great deals in plant ecology. He contributed to the developments of automatic and portable instruments in order to carry out accurate measurements under extreme climatic conditions. Hot and cold deserts, including Negev, Lapland and Antarctica have been the scenarios of his fieldwork. His papers on lichenology, more than the half of his whole production, received great attention from plant ecologists in general. His many reviews about lichen ecology, biodiversity and ecophysiology have became especially famous. Ludger Kappen represents on the highest level the good balance between research and teaching that all of us try to reach at the University.

Ludger Kappen and his team were most attractive to colleagues and lichenologists everywhere in the world. As many others I benefited from his hospitality for many years. We owe him the deepest gratitude for stimulating discussions, fair and fruitful cooperation, teaching and many kinds of help and support. We all are happy to see the Acharius Medal presented to him.

Leopoldo Sancho, Madrid

Marie-Agnès Letrouit-Galinou

Marie-Agnès is a very special lichenologist. She has maintained active research interests in, and made significant contributions to, diverse aspects of the field for over 50 years. Early on she came under the spell of Marius Chadefaud, under whose guidance she prepared her doctoral thesis on the comparative anatomy and ontogeny of discolichen ascomata. Her first publication in 1953 was with Chadefaud and on the structure of asci in *Pertusaria* species. Carefully executed and pioneering developmental and structural studies were to become her primary focus. She was one of what I like to refer to as Chadefaud's "gang of four", along with André Bellèmere, Marie-Claude Janex-Favre, and Agnès Parguey-Leduc, who started to show from critical observation that the then dominating Nannfeldt-Luttrell views of ascomycete development and classification were unsound. Many were sceptical of their drawings and interpretations as they often seemed so contrary to the accepted views, and that much was in French also provided a barrier, although Marie-Agnès in particular produced major reviews of the group's work in English. Yet the "gang of four" continued their painstaking documentation, and it was not until the mid-1970s that the tide began to turn. Electron microscopic studies started to show that they were studying real structures, and mycologists at large started to wake-up to and recognize the significance of their discoveries, which are today also supported by overwhelming molecular data.

But she was also influenced by Henry des Abbayes with whom she worked at Rennes in the early stages of her career. In consequence she had a deep interest in lichen systematics and ecology, and might have been in danger of becoming an alpha-taxonomist, producing a masterly monograph of *Laurera* back in 1958. She later developed a special

interest in the effects of air pollution on lichens, also stimulating others to work in depth on this topic in France.

There is also Marie-Agnès the organiser. She played a key role in the establishment of the Association Française de Lichénologie in 1976 and was its first Vice-President and its second President (1978-80). In 1993 I was honoured to work closely with her in the planning of the NATO Advanced Research Workshop on "Ascomycete Systematics" held in Paris; this was an enormously successful and timely event, involved 140 researchers from 24 countries, and did much to cement what is now the routine inclusion of lichen-forming fungi in overall ascomycete systems. On this occasion, the "gang of four" presented their now widely lauded results as the key background papers to the meeting; what a change in perception there had been since the 1960s!

Finally there is Marie-Agnès the person. Always gracious, unassuming, and doing all she can to promote lichenology in France. And at times often under difficult personal circumstances. I remember the modest microscopes with which they worked, and on one visit finding that the three ladies of the gang were painting the walls of their laboratory. She retired in August 1999 from her position as Directeur de Recherches in CNRS (Centre National de la Recherche Scientifique) held in the Université Pierre et Marie Curie in Paris, donating her library to the Musee Nationale d'Histoire Naturelle. It is difficult to think of a more deserving recipient for the IAL's Acharius Medal.

David L. Hawksworth, Madrid

Mason Hale Award

Presented to **Jean-Claude Walser** for his thesis entitled:

Microsatellites as new markers to investigate population genetic processes in lichens using *Lobaria pulmonaria* (L.) Hoffm. as a model species

Nuclear microsatellites have become widely used molecular tools to study population processes in animals, plants, and fungi. However, in lichenized fungi, the molecular studies have mostly focused on taxonomic relationships, and the markers available so far showed only little intraspecific variation and were therefore of only limited use for population genetic studies. Greater genetic variation in lichen species has been detected with random amplified polymorphic DNA markers (RAPD), but anonymous DNA-fingerprinting methods are not universally applicable in mutualistic endosymbiotic systems. Hence, the basic requirement for population genetic studies in lichenized fungi was the development of fungal-specific polymorphic molecular markers.

In his PhD, Jean-Claude Walser has selected the epiphytic lichen species *Lobaria pulmonaria* as a model species for studies in population genetics, and he has established and characterized twelve fungus specific microsatellite loci for this species. The potential resolution of the genetic variation and differentiation detected with these new markers was evaluated at different spatial scales. In addition, a cross-species amplification test demonstrated that the same primers could also be used for genetic studies of other taxa closely related to *L. pulmonaria*.

Genetic diversity of three *L. pulmonaria* populations from Switzerland and nine populations from British Columbia (Canada) was investigated by means of fragment length data from six microsatellite loci. The high genetic diversity within the investigated populations and evidence of recombination from the association of alleles indicated that *L. pulmonaria* was substantially outcrossing. Nevertheless, clonality was also detected in all twelve investigated populations. However, the presence of recurring multilocus genotypes influenced the spatial genetic structure only within low-density, isolated populations from Switzerland but not in populations of *L. pulmonaria* from British Columbia, where the species was abundant and widespread. Given that *L. pulmonaria* has suffered a significant decline in Central Europe within the last few decades, the results could be interpreted as indicative of genetic bottlenecks owing to increased habitat loss or disturbance history. Hence, as in vascular plants, exogenous factors, such as disturbance or fragmentation, might substantially alter population processes and, thus, the genetic structure of lichen populations.

The epiphytic lichen *L. pulmonaria* vanished almost completely from the Swiss lowlands, and the remnant populations in the Pre-Alps and the Jura Mountains have become increasingly fragmented and isolated from each other. While similar multilocus genotypes were found across different populations from the mainland of British Columbia, the Swiss populations did not have any shared genotypes. Within populations, the maximum distance between identical genotypes was 230 m, and suitable habitat patches at a distance of 350 m from the source tree seemed to be too far away to be colonized. This and the clustered distribution of multilocus genotypes suggested that dispersal of vegetative propagules was spatially limited both within and among populations in Switzerland. Indeed, many endangered lichens are regarded as organisms with limited dispersal capacity. Lichen propagules showed no species-specific morphological characteristics which made direct experimental assessments of dispersal distances impossible. Therefore, a new and sensitive molecular approach was introduced to study dispersal in *L. pulmonaria* under natural conditions. The first results showed that a considerable amount of dispersed propagules was found within a radius of 10 m from the source tree and that still a few propagules reached distances of up to 50 m. However, long-distance dispersal over hundreds of meters or even kilometers could not bee demonstrated in *L. pulmonaria*, although it would be crucial for gene flow among populations.

In lichens, geographic isolation is often regarded as the first step towards differentiation and allopatric speciation. However, in organisms such as lichens, it is not clear whether long-distance dispersal, past range fragmentation or slow evolutionary rates are responsible for the broad, but often scattered, geographic distribution patterns observed today. The non-overlapping allele size distribution in one of the microsatellite loci between samples from two continents, geographically restricted alleles at other loci, low estimated gene flow rates based on private alleles, multivariate analyses of multilocus genotypes, and analyses of molecular variance (AMOVAs) all indicated that *L. pulmonaria* populations from British Columbia and Switzerland formed two different evolutionary lineages. This clear genetic differentiation between populations from British Columbia and Switzerland thus questions recent genetic exchange. Within British Columbia, Jean-Claude Walser found also a clear genetic differentiation between populations from Vancouver Island and those from the mainland. Together with several other lines of evidence from the microsatellite data, this suggests that Quaternary glaciation and restricted gene flow substantially influenced the genetic structure of *L. pulmonaria* populations in British Columbia.

All the above results demonstrate the great potential of microsatellites to study population and microevolutionary processes in lichen species. However, neutral molecular markers do not allow drawing conclusions on ecological adaptation. Classical transplant experiments with thalli from different provenances were thus developed by Jean-Claude Walser to study adaptive variation in *L. pulmonaria*. The experiments were established in summer 2000 and the first results were promising, though more time will be needed until final conclusions can be drawn from the slowly growing transplants. The occurrence of potentially adaptive traits showed that thalli from different provenances reacted in a similar way to similar ecological conditions. However, some traits also pointed towards distinct provenance effects and, hence, potential adaptation. No evidence was found so far that resident "home" thalli were better adapted than thalli from other provenances.

The present study was among the first to investigate population genetic processes of lichenized fungi using molecular methods. Compared with earlier studies, its strength is the employment of new polymorphic molecular markers and the high number of populations and samples investigated. Microsatellite markers revealed a great potential as new genetic markers in the population biology of lichens and the molecular tools developed by Jean-Claude Walser will open novel fields of lichenological research such as phylogeography, conservation genetics and landscape genetics.

Christoph Scheidegger, Birmensdorf

Jean-Claude Walser in his lab (phytograph by Christoph Scheidegger)

Sylvia Duran Sharnoff Education Award for Lichenology

The International Association for Lichenology named its Education Award after Sylvia Duran Sharnoff for good reason. She was a remarkable woman, a talented nature photographer, and a dedicated naturalist, who had a passion for educating the general public about the beauty and importance of lichens. It was this passion that led her to suggest preparing a guidebook for the lichens of North America and to convince me, with all my prior commitments and unfinished research papers, that such a book was long overdue and could be completed successfully. She and her husband, Steve, an equally gifted photographer, immediately started applying for grants, taking local photographs, and preparing for their 4-year odyssey criss-crossing the American continent to photograph as many of the 3500 species then known for the area. While they travelled, Sylvia and Steve gave dozens of slide shows and lectures to the public, showing people that lichens were worthy of their attention and protection.

Sylvia had a searing intellect and, although certainly not lacking in humility, was tough to argue with. She finally convinced a number of foundations to support the North American Lichen Project, and by doing so, helped to bring our book into exsistence. The book itself is a testimonial for her desire to educate the public about lichens. It was a great tragedy that cancer prevented her from seeing how successful her idea was, as she died almost 3 years before the book finally appeared. Knowing Sylvia, I am sure that she would have been absolutely delighted to see high quality of the school projects now on the Internet, and to be part of the IAL's education award.

Irwin Brodo, Ottawa

Class IIId, Scuola Media Statale L. Trombini, Tirano

The winner of the Sylvia Sharnoff Award is the class IIId of the "Scuola Media Statale L. Trombini" of Tirano, in the Province of Sondrio, Italy. The class has worked within a broader project coordinated by Prof. C. Malavasi, which was originally started in the province of Mantova in 1996. In the following years the project was extended to a network of more than 30 schools (age:12-18 years) that have entered a coordinated biomonitoring project centered on the use of lichens for monitoring air quality. Pupils had to follow special courses in applied lichenology, and had to teach what they have learnt to pupils of other schools. In their web page, the boys of Tirano present the results of their biomonitoring study in the provincial territory. The presentation, however, is not limited to the results. It constitutes a veritable introduction to biomonitoring in general, and highlights the special role of lichens in this field. The web page is unusually rich and well structured. Although written in Italian, it can be of general interest as an outstanding example of the use of lichens in educational programs
http://www.smtrombini.valtellina.net/licheniinrete/index.htm

Pier Luigi Nimis, Trieste

NEWS

Lichens at IBC 17 in Vienna (Austria), July 2005

A symposium entitled "Lichen life histories: developmental and life cycle perspectives on lichen fungi and algae" will be offered at the International Botanical Congress in Vienna, 2005. The symposium will attempt to encompass any developmentally oriented studies of lichen fungi and algae, with work focusing on lesser known aposymbiotic phases, reproduction, dispersal, relichenization, ontogeny, etc. being particularly welcome. The aim will be to better understand lichen biology by acquiring a more integrated perspective on the life cycles of the symbionts. We look forward to seeing you there and hearing your contributions on this topic!

The symposium is currently scheduled for section 6, Ecophysiology and Biogeochemical Cycles, symposium no. 13. For more information and registration, see the congress website at <www.ibc2005.ac.at>.

William B. Sanders, Madrid

New lichenological jounal

Opuscula Philolichenum - little works of lichen lovers, a title suggested by Richard Harris - is an experimental lichenological journal, published once or twice a year for free. It is edited by James Lendemer, a research associate at ASU. Approximately 50 hard copies are published to make taxonomic acts valid and sent out to various institutions and lichenologists in North America and Europe. If you feel you or your institution should receive a free hard-copy issue please contact the editor James Lendemer at lendemer@acnatsci.org. Another ten or fifteen issues can be distributed free on the OP's third-world budget. The whole first issue is available for free online in Pdf. Files at http://clade.acnatsci.org/lendemer/opus.html and contains the publication of a new species of *Placynthiella* from North America and a variety of *Endocarpon*, for instance, as well as a preliminary checklist of the lichens of New York by Richard Harris, an analysis of the state of *Acarospora* studies in North America and a taxonomic study of *Acarospora smaragdula* var. *lesdainii* (Harmand in A.L. Smith) H. Magn. in California by Kerry Knudsen, as well as two floristic studies of eastern North America and the publication of Fascicles II and III of the Lichens of Eastern North America by James Lendemer. The second issue will be published soon to include more peer-reviewed floristic and taxonomic studies as well as literature reviews. The focus of the journal is on the North America lichen flora and the editor James Lendemer should be contacted for the submission of proposals or articles. Peer reviewers for articles in issue two include Theodore Esslingler, Laurens Sparrius, and Clifford Wetmore. The journal is a humble experiment using modern technology and software to publish papers cheaply in a time when scientific publishers and limited audiences put journals and monographs beyond the access of less affluent lichenologists and cash-strapped institutions and herbaria. The next issue's availability online will be announced on the lichen list-serve.

Kerry Knudsen, Wildomar, California

Windstorm destruction to forest in the Tatry National Park, Slovakia

On 19 November 2004 an exceptionally strong windstorm swept through the oldest national park in Slovakia – the Tatry National Park (TANAP). The wind averaged 90-115 km/h, and in some places reached even 170 km/h. The storm, which lasted from 3.00 to 8.00 p.m., was followed by heavy snowfall.

The windstorm completely damaged or severely affected 12 000-13 000 hectares (i.e. one third) of the Park's forests. The volume of damaged and uprooted trees amounted to 1.5-3.0 million cubic metres of soft wood, representing 90% of the total annual harvest for this type of wood in Slovakia. A 50 km long and 2.5-5.0 km wide strip of forest from Podbanské to Tatranská Lomnica was completely destroyed. The most affected forests were artificial spruce monocultures, 50-100 years old (85% spruce, the remainder fir and European larch), situated in the lower C zone of the Park. The least harmed were the forests in the core zone A (c. 2% of forests).

Damage in the Západné (Western) Tatry Mountains, the Belianske Tatry Mountains and the Polish Tatry Mountains were not as severe as that in the Vysoké (High) Tatry Mountains.

How did this affect the lichens? The Tatry National Park is one of the most important lichenological sites not only for Slovakia, but for Europe as a whole. More than 1100 lichen taxa have been recorded from here, including about 300 epiphytic species. Many of these species are critically endangered and survived, until now, only in the vast forests of the Tatry Mountains. The loss of these forests means not only the loss of epiphytic lichen diversity from an area of c. 13.000 hectares, but also major ecological repercussions which will probably affect future climatic changes which will influence the lichen flora.

Sad to say, there is only one thing we can do now: collect the lichens before the timber is removed, so that they are at least for future research in herbaria!

Eva Lisická, Bratislava

Index of Lichen Distribution Maps now online

The index of published lichen distribution maps is now available online. The address is: www.gbif-mycology.de/lichenmaps. Another possibility is to go from www.mycology.net via “biogeography” to “maps”. The intention is to include references for all published maps of lichenized, lichenicolous and related fungi. The database will be maintained by the author and therefore users are asked to inform me (address see editor) about omissions and mistakes. Users can search for published maps of a given taxon and/or for a region. Literature sources are linked with the Recent Literature on Lichens Database.

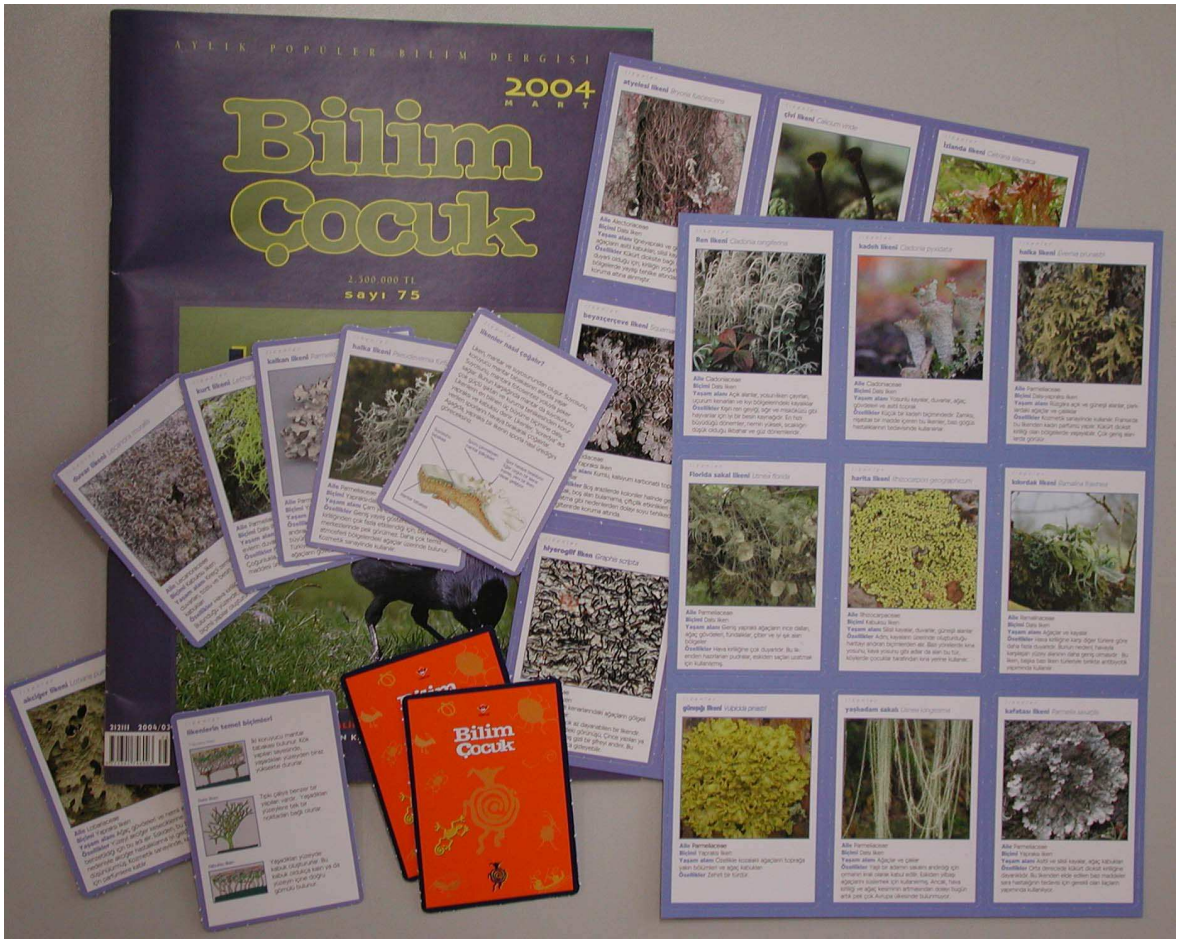
Peter Scholz, Schkeuditz

Lichen cards for children

Likenler tanıyoruz (We know the lichens) is the title of a small contribution to a monthly popular journal for children in Turkey. One text page introduces to lichenology. Three plates are added, supplying 27 cards when separated. High quality colour photographs are complemented by the Turkish and scientific names of the lichen, relationship to a family and growth form, and mention of the substrata, as well as instructive information on the use, derivation of the name, the use as bioindicators and other interesting data.

Are there any other examples of lichens used in a similar educational manner?

This contribution is a co-production of the Turkish government (TÜBITAK) as the editor of the journal, with Atilla YILDIZ (secretary of TLT) providing the scientific details. Both are congratulated for one further demonstration that lichenology in Turkey is in good health. Long may this continue!



Volker John, Bad Dürkheim

Personalia

In 2005 **Anders Nordin**, Museum of Evolution, and **Leif Tibell**, Department of Systematic Botany, Uppsala University, Sweden, will start working on the genus *Aspicilia*. Money has been granted from the Swedish Taxonomy Initiative. The project aims at revising the taxonomy and phylogeny of *Aspicilia*, primarily the Swedish species, by use of morphological, chemical and molecular data. The work will include an investigation of the delimitation of *Aspicilia* in relation to other genera in the Hymeneliaceae, but the central point is to clarify the taxonomy at species level. Also the ecology and the current status of the species will be investigated, and possible Red List candidates will be identified.

In March 2004, **Mark Seaward** (Bradford, UK) received an honorary doctorate from the University of Wroclaw for his international contribution to biomonitoring, more particularly for his lichenological work in Poland over the past 27 years.

Harry Sipman (Berlin) participated in October 2004 in an introductory tropical lichen course in Las Cruzes Biological Station in Costa Rica, very well organized by **Robert Lücking** in the framework of the TICOLICHEN project. The great enthusiasm of the participants and the evidence of a strong interest in lichens among Latin American students were a wonderful experience. His field work included a lichen inventory of 17 trees in montane forest in southern Ecuador. His student **Nicole Noeske** is about to finish her PhD thesis on cryptogamic epiphytes in forest and disturbed vegetation, and **Nicole Mandl** continues her thesis work on cryptogams-rich shrub vegetation, both in the same area. Together with **Mark Seaward**, **Mathias Schulz** and Iranian lichen enthusiasts **A. A. Maassoumi** with students **M. Hadjmoniry** and M**. Sohrabi,** a checklist of Iranian lichens is just published in the journal Willdenowia. And together with **Mark Seaward**, **Volker John** and **Luciana Zedda**, a checklist for the lichens of Syria was published.

News from Helsinki

Teuvo Ahti (Helsinki) kindly informed us of the following:

Jouko Rikkinen is a new Professor of Systematic Mycology (incl. lichenology) at Faculty of Biosciences, University of Helsinki, starting from 1 Jan 2005.

Soili Stenroos is the new Curator of Lichens, Botanical Museum, University of Helsinki, succeeding **Orvo Vitikainen**, who retired in Sept 2004 (but who is still continuing research). However, Soili has been granted research leave at the Academy of Finland to 2009, but is moving from Turku to the Botanical Museum, Helsinki, together with her Lichen Team, which includes **Leena Myllys**, **Katileena Lohtander**, **Filip Högnabba**, and (part-time) **Arne Thell**. The Acting Curator has not yet been appointed.

Please note that in all Finnish postal addresses the country code "FIN" has been changed to "FI".

Address changes

Steve Stephen Sharnoff, 765 San Diego Road, Berkeley, CA 94707, (510) 525-7543.
lichen@idiom.com

REPORTS

Uses of Lichens: 1. Isla-Moos® and Isla-Mint® Herbal Lozenges

Peter Scholz

For a long time it has been known that *Cetraria islandica* has pharmaceutical symptom relieving properties useful against dry coughs and inflammational diseases of the upper respiratory tract because of its soothing, protecting and antitussive effects. There are teas containing *C. islandica* as well as lozenges. Two special German brands are "Isla-Moos®" and "Isla-Mint®" produced by the German pharmaceutical company "Engelhard Arzneimittel GmbH & Co. KG" at Niederdorfelden near Frankfurt/M. (formerly at Frankfurt). The following information has been obtained by the author directly from the company and via the homepage (www.engelhard-am.de).

Isla-Moos® has been produced continuously since the foundation of the enterprise in 1872. Twelve years before the product had been developed by Karl Philipp Engelhard in his pharmacy at Frankfurt as "Isländisch Moos Pasta". At this time it was the first proprietary medicine in Germany, soon after being exported to Ratibor/Racibórz (Prussian province of Silesia, now Poland), Amsterdam (The Netherlands) and Savoy (France).

The production of Isla-Mint® began in 1991. The production of both products increased from about 1.38 million packages in 1991 to about 2.8 million packages recently. Isla-Moos® and Isla-Mint® has been exported to other countries for 30 years; today these go to 26 different countries among them some Near East Countries, Taiwan and Georgia. (More detailed information on exports are to be found on the homepage.) The lichen material for this amount of production is imported from various European countries. It seems that Isla-Moos® and Isla-Mint® are the most successful and most widely used lichen pharmaceuticals ever produced.

A recent study on the tolerability of Iceland Moss Lozenges in upper respiratory tract diseases of children was published by Hecker & Völp (2004), a free abstract of which is available from www.karger.com/journals/fkm_bk.htm. I am grateful to Mrs A. Fetscher and Dr M. Hecker of Engelhard Arzneimittel for their help in the preparation of this article.

Reference

Hecker, M. & Völp, A. (2004): Verträglichkeit von Isländisch-Moos-Pastillen bei Erkrankungen der oberen Atemwege – multizentrische Anwendungsbeobachtungen mit 3143 Kindern. *Research in Complementary and Classical Natural Medicine* **11**(2): 76-82.

It is hope that this article will generate a series of short contributions in our *Newsletter* on the uses of lichens in various countries in order to obtain more precise information on all aspects of current commercial and non-commercial uses of lichens.

The Editor

New Literature:

ANDERSSON, L., MARTVERK, R., KÜLVIK, R., PALO, A. & A. VARBLANE 2003. Woodland key habitat inventory in Estonia 1999-2002. – Tartu.

The Woodland Key Habitat inventory was launched as a joint Estonian-Swedish project in 1999 to access the distribution of forest habitats with the highest value in managed forests. The report gives an overview of the background of the Woodland Key Habitat project in Estonia with respect to the historical context and the natural diversity and ecology of

Estonian forests. It also includes a description of the inventory method. Lichens are used among other organisms as indicator species and some rare and ecologically interesting species are discussed in detail.

CIURCHEA, M. 2004. Determinatorul lichenilor din România. – Editora BIT, Sirues, Romania. 488 pages. ISBN 973-9327-85-0. Price: not indicated.
Contact: ciurchea@phys.ubbcluj.ro.

A taxonomic arrangement of all 1205 lichens known from Rumania with short characteristics literature references, synonymy, records and keys to the species. Appendices include a glossary and sketches of characters. In Rumanian. Part of this text is available in the internet under http://www.bgbm.fu-berlin.de/sipman/Zschackia/Rumania/catalog.htm. It is foreseen that the website and preliminary version will generate corrections and additions and that afterwards an improved version will be published.

CLERC, P. 2004. Les champignons lichénisés de Suisse. Catalogue bibliographique complété par des données sur la distribution et l'écologie des espèces. – Cryptogamica Helvetica 19 : 1-314. ISSN 0257-9241. Price € 64 (96,- CHF).
Orders from: Library Geobotanisches Institut ETH, Zollikerstrasse 107, CH-8008 Zürich, Switzerland or lilo.koenig@env.ethz.ch.

A checklist of the lichenized fungi of Switzerland with data on topographical and vertical distribution, ecology and full listing of literature but without illustrations.

FALTYNOWICZ, W. 2003. The lichens, lichenicolous and allied fungi of Poland. An annotated checklist. – W. Szafer Institute of Botany, Polish Academy of Sciences, Lubicz 46, PL-31 512 Kraków, Poland. 435 pages. ISBN 83-89648-06-7. Price not indicated; to be ordered from the publisher.

An alphabetical arrangement of all 1768 species of lichens and lichenicolous fungi known from Poland, with indication of substrate, distribution in Poland, and references.

GILBERT, O. 2004. The Lichen Hunters. The Book Guild, London. ISBN 1 85776 930 (hardback). Price: £ 16.95.

Part travelogue and part a social history of the British Lichen Society. A review will follow in the next issue.

KALDA, A. & RANDLANE, T. (text); PAAL, T. & SAAG, A. (photographs) 2004. Väike sammalde ja samblike raamat. – AS Bit, Tallinn, Tartu, Pärnu & Jõhvi. ISBN 9985-2-0926-5. [In Estonian]. Price: 226 Estonian Crowns. Available from: www.raamatukoi.ee.

A pocket-size guidebook of bryophytes and lichens in Estonia containing 42 bryophytes and 60 lichens with descriptions and full-size color photographs of each species.

KHODOSOVTSEV, A. YE.; KONDRATYUK, S. YA.; MAKAROVA, I. I. & A. N. OXNER 2004. Handbook of the lichens of Russia 9. Fuscideaceae, Teloschistaceae. – Sankt-Peterburg: Nauka. ISBN 5-02-026207-2; 340 pages. Price: not indicated [In Russian].

The 9th volume of the wellknown series of lichen floras of Russia (vol. 6-9) or formerly the Soviet Union (vol. 1-5).

LAMBLEY, P. & P. WOLSELEY (eds.) 2004. Lichens in a changing pollution environment (English Nature Research Reports 525). – Peterborough. ISSN 0967-876X 121 pages. Price : free, Available from the publisher: English Nature, Northminster House, Peterborough PE1 1UA, U.K.

Papers presented at a workshop at Nettlecombe, Somerset 24-27 February 2003 organised by the British Lichen Society and English Nature. Contains a plenary address by M.R.D. Seaward and papers by K. van Herk; L. Davies, W. Purvis & P. James; R. Kricke & G.B. Feige; N. Stapper & I. Franzen-Reuter; S. Loppi in session 1 "A changing lichen flora"; papers by A. Vipond; C. Whitfield & S. Bareham; M.A. Sutton et al.; D. Chadwick & D. Scholefield in session 2 "The pollution environment"; papers by A. Aptroot; P. Giordani; L.J. Sheppard et al.; P. Wolseley et al. in session 3 "Selecting and monitoring species and communities" and papers by B. Edwards; P. Lambley, P. Wolseley & P. James in session 4 "Conserving lichen communities and species diversity".

NIMIS, P. L. & MARTELLOS, S. 2004. Keys to the lichens of Italy. I. Terricolous species. – Edizioni Goliardiche, Trieste. ISBN 88-88171-73-8. Price € 45,00.

Despite the title a full flora of the terricolous lichens of Italy with keys, extended descriptions and distribution maps.

RANDLANE, T. & SAAG, A. (eds.) 2004. Eesti pisisamblikud. – Tartu. ISBN 9985-56-916-4. Price: 300 Estonian Crowns. Available from: www.raamatukoi.ee

A flora of crustous lichens and lichenicolous fungi of Estonia including keys, descriptions and color photographs of 84 species.

SERUSIAUX, E., DIEDERICH, P. & LAMBINON, J. 2004. Les macrolichens de Belgique, du Luxembourg et du nord de la France - Clés de détermination. – Ferrantia 40: 1-192. ISSN 1682-5519. Price € 10. Order from: http://www.naturmusee.lu

This new flora of the macrolichens of Belgium, Luxembourg and northern France is rightly said (in its English abstract) to be "the logical continuation of the annotated Checklist of lichens and lichenicolous fungi of Belgium and Luxembourg" (Diederich & Sérusiaux 2000, Luxembourg: Musée national d'histoire naturelle, see ILN **33**: 17-18). It contains as well as the keys short, mainly ecological descriptions and distribution data within the study area for all of the 327 treated species; 125 species are complemented by excellent colour photographs and 241 have distribution maps. No taxonomic novelties are introduced but "*Anema tumidulum* in ed." is included. The authors can be congratulated for a very practical, well illustrated and very reasonable priced book. It will certainly be of much value not only for the specialist, but also for those people working in nature conservation, biomonitoring, landscape management etc.

The Editor

ST. CLAIR, L. L. & SEAWARD, M. (eds.) 2004. Biodeterioration of Stone Surfaces. Lichens and Biofilms as Weathering Agents of Rocks and Cultural Heritage. – Springer, Berlin (Hardbound) 290 pages, ISBN 1-4020-2802-2. Price € 99.00, $ 129.00, £ 69.00. Info: www.oriented.cz/3/28032.biodeterioration.of.stone.surfaces.htm

TÜRK, R., HAFELLNER, J. & C. TAURER-ZEINER 2004. Die Flechten Kärntens. (Sonderreihe des Naturwissenschaftlichen Vereins für Kärnten 2). – Klagenfurt. 336 pages, Price € 19,50. Orders from nwv@landesmuseum-ktn.at

An overview and checklist of the lichens of the Austrian province of Carinthia (Kärnten) with many species illustrated by color photographs and distribution maps. A review will follow in the next issue.

REVIEWS

Lichenological Journals: 1. Herzogia

R. Stordeur & P. Scholz

The main idea for creating the bryological-lichenological working group of Central Europe (Bryologisch–lichenologische Arbeitsgemeinschaft für Mitteleuropa) in 1968 was to bring together professionals and amateurs interested in bryophytes and lichens. The main goal was to connect all "friends of the subject" who were active in research. From the beginning so-called amateurs, in fact often specialists in their field, were fully involved, with no political boundaries preventing people from working together. For practical reasons, the founders restricted the scope to Central Europe because annual field meetings should play an important role. Colleagues from the Eastern Europe were actively involved when possible; the creation of an official society was avoided for various reasons, but mainly since colleagues from the East would have had difficulty in joining a Western society at that time. However, after serious thought, involving colleagues from three countries, a society Bryologisch–lichenologische Arbeitsgemeinschaft für Mitteleuropa (often shortened to BLAM) was officially created in 1994.

A further important aim was the exchange of information by means of a journal "Herzogia, Zeitschrift der bryologisch-lichenologischen Arbeitsgemeinschaft für Mitteleuropa" which commenced in 1968 under the editorship of G. Follmann, E. Frey, F. Koppe, J. Poelt and W. Schultze-Motel, The journal, named in honour of the German bryologist Theodor Herzog (1880-1961), mainly caters for smaller original papers and notes on bryophytes and lichens from Central Europe and neighbouring areas. Over the years, due to improving possibilities to travel to other areas, published papers were not necessarily restricted to Central Europe, as exemplified by Kilias's European monograph of saxicolous *Catillaria*-species with more than 200 pages published in 1981.

In the beginning, two small issues appeared each year, with four issues constituting one volume, but already by volume 3 triple and double issues were a regular feature. This resulted in the publication of one double issue per year with some omissions during the period of 1976-1993 (volumes 4-9). Since volume 10 (1994) every issue consitutes one

volume of at least 230 pages, although there have been further omissions in some years; furthermore, during the 36 years of publication, its publishers and editing locations have as detailed below:

Herzogia, **1**, 1, pp. 1- 84 (1968) Lehre: J. Cramer
Herzogia, **1**, 2, pp. 85-214 (1969) Lehre: J. Cramer
Herzogia, **1**, 3, pp. 215-348 (1969) Lehre: J. Cramer
Herzogia, **1**, 4, pp. 349-483 (1970) Lehre: J. Cramer
Herzogia, **2**, 1, pp. 1-128 (1970) Lehre: J. Cramer
Herzogia, **2**, 2, pp. 129-266 (1971) Lehre: J. Cramer
Herzogia, **2**, 3, pp. 267-394 (1972) Lehre: J. Cramer
Herzogia, **2**, 4, pp. 395-520 (1973) Lehre: J. Cramer
Herzogia, **3**, 1, pp. 1-168 (1973) Lehre: J. Cramer
Herzogia, **3**, 2-4, pp. 171-501 (1975) Lehre: J. Cramer
Herzogia, **4**, 1-2, pp. 1-212 (1976) Lehre: J. Cramer
Herzogia, **4**, 3-4, pp. 213-420 (1977) Lehre: J. Cramer
Herzogia, **5**, 1-2, pp. 1-208 (1979) Braunschweig: J. Cramer
Herzogia, **5**, 3-4, pp. 209-622 (1981) Braunschweig: J. Cramer
Herzogia, **6**, 1-2, pp. 1-328 (1983) Braunschweig: J. Cramer
Herzogia, **6**, 3-4, pp. 329-504 (1984) Braunschweig: J. Cramer
Herzogia, **7**, 1-2, pp. 1-312 (1985) Berlin, Stuttgart: J. Cramer in Gebr. Borntraeger
Herzogia, **7**, 3-4, pp. 313-684 (1987) Berlin, Stuttgart: J. Cramer in Gebr. Borntraeger
Herzogia, **8**, 1-2, pp. 1-264 (1989) Berlin, Stuttgart: J. Cramer in Gebr. Borntraeger
Herzogia, **8**, 3-4, pp. 265-448 (1990) Berlin, Stuttgart: J. Cramer in Gebr. Borntraeger
Herzogia, **9**, 1-2, pp. 1-320 (1992) Berlin, Stuttgart: J. Cramer in Gebr. Borntraeger
Herzogia, **9**, 3-4, pp. 321-885 (1993) Berlin, Stuttgart: J. Cramer in Gebr. Borntraeger
Herzogia, **10**, pp. 1-270 (1994) Berlin, Stuttgart: J. Cramer in Gebr. Borntraeger
Herzogia, **11**, pp. 1-263 (1995) Berlin, Stuttgart: J. Cramer in Gebr. Borntraeger
Herzogia, **12**, pp. 1-250 (1996) Berlin, Stuttgart: J. Cramer in Gebr. Borntraeger
Herzogia, **13**, pp. 1-248 (1998) Berlin, Stuttgart: J. Cramer in Gebr. Borntraeger
Herzogia, **14**, pp. 1-229 (2000) Berlin, Stuttgart: J. Cramer in Gebr. Borntraeger
Herzogia, **15**, pp. 1-302 (2002) Berlin, Stuttgart: J. Cramer in Gebr. Borntraeger
Herzogia, **16**, pp. 1-282 (2003) Halle/Saale: Druck-Zuck GmbH
Herzogia, **17**, pp. 1-342 (2004) Halle/Saale: Druck-Zuck GmbH

New members or others interested in purchasing back issues can order these from the Society or the publisher. Complete volumes or single issues of volumes 7-15 are still available from the publisher Verlagsbuchhandlung Gebr. Borntraeger, Johannesstraße 3A, D-70176 Stuttgart. Volumes 10-17, as well as some single issues (issues 3-4 of volumes 5, 8 and 9) are also available from the treasurer Dr. Felix Schumm, Mozartstraße 9, D-73117 Wangen (e-mail: schumm@compuserve.com). For more information, including content and prices, see the BLAM homepage (www.blam.privat.t-online.de)

Editorial Remark

Since several smaller lichenological journals had 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 number (3 per volume); vol. 2–8: 0.50 USD per number (2 per volume); vol. 9–13: 1.00 USD per number (2 per volume); vol. 14–17: 1.50 USD per number (2 per volume). Back issues from vol. 20–29 are available for 1.00 USD per number (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-14191 Berlin, Germany, fax: (+49)-30-84172949, e-mail: *hsipman@zedat.fu-berlin.de*. For later issues contact the Editor.

Lichens-l 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-ang.kfunigraz.ac.at/~grubem/ialweb/ial.html

The cover-page illustration

The photograph, kindly provided by Juliane Blaha (Graz), shows *Physconia distorta* (Slowenien, Sneznik, 4.8.1997, leg. J. Prügger).

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 Liquenologia, 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: Norbert J. Stapper, e-mail: *nstapper@t-online.de*, web page: **home.t-online.de/home/blam-ev/home.htm**

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*

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.ahti@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*

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: Giovanni Caniglia, Dipartimento di Biologia, V.le G. Colombo, 3, I-35121 Padova. Phone: (+39)-049-8276-239, fax: (+39)-8276-230, e-mail: *caniglia@civ.bio.unipd.it*, web page: **www.lrcser.it/~sli**

Japan: The Japanese Society for Lichenology (JSL). Info: Yoshikazu Yamamoto, Secretary of JSL, Akita Prefectural University, Shimoshinjyo-nakano, Akita, 010-0195 Japan, fax (+81)-18-872-1678, e-mail: *yyamamoto@akita-pu.ac.jp*

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*

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 Søchting, 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-hotel.uu.se/evolmuseum/fytotek/NLF/**

North America: American Bryological and Lichenological Society, Inc. (ABLS). Info: James D. Lawrey, Department of Biology MSN 3E1, George Mason University, 4400 University Drive, Fairfax, Virginia 22030-4422, USA. Phone: (+1)-703-993-1059, fax: (+01)-703-993-1046, e-mail: *jlawrey@gmu.edu*, web page: **ucjeps.berkeley.edu/bryolab/ABLS.html**

North America, Northwest: Northwest Lichenologists (NWL). Info: Bruce McCune, 1840 NE Seavy Avenue, Corvallis, Oregon 97330 USA. E-mail:

mccuneb@bcc.orst.edu, web page: **www.nwlichens.org** (To get on the e-mail list, contact Sherry Pittam: *pittams@bcc.orst.edu*)

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/rlmoe/cals.html**

North America, East: Eastern Lichen Network. Info: Marian Glenn, fax: (+1) 973-761-9772, e-mail: *glennmar@shu.edu*

South America: Grupo Latino Americano de Liquenólogos (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

Slovakia: Slovak Botanical Society – Lichenological Working Group, c/o Institute of Botany, Slovak Academy of Sciences, Dubravska cesta, 14 842 23 Bratislava, Slovakia. Info: Anna Guttova, phone: 07-59412501, fax: 07-54771948, e-mail: *botugutt@savba.savba.sk*, web page: **www.botanika.sk**

Spain: Sociedad Española de Liquenologia (SEL). Info: Ana Rosa Burgaz, Dpto, Biologia Vegetal I, Fac. CC. Biologicas, Universidad Complutense, E-28040-Madrid. Phone (+34) 1 394 5042, fax: (+34) 1 3945034, e-mail: *arburgaz@bio.ucm.es*

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*

Turkey: Club of Turkish Lichenologists (TLT). C/o: Ayşen Türk, Anadolu University, Dept. of Biology, TR-26470 Eskişehir, Turkey. E-mail: *aturk@anadolu.edu.tr* Info: Attilâ Yıldız, Ankara University, Dept. of Biology, TR-06100 Beşevler-Tandoğan/Ankara. Phone: (+90)-3122126720, fax: (+90)-3122232395, e-mail: *ayildiz@science.ankara.edu.tr*

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Printed by Druck-Zuck GmbH Halle/S.