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# **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 2012-2016) 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 IAL7 Symposium (Bangkok, Thailand, 2012) are listed below, and will serve until 2016.

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# **ASSOCIATION NEWS**

# Message from the President

Lichens are among the evolutionary most successful symbiotic systems, consisting of fungal (with about 28,000 estimated species) and photosynthetic partners. The photosynthetic partners are mostly green algae and/or cyanobacteria, but additional symbiotic partners, such as bacteria, have recently been found to be present in the lichen symbiosis. This symbiotic system includes partners from different domains of life and two of the three major clades of eukaryotes, and hence provides an excellent tool to study the evolution of cooperation of different partners and their adaptations.

The International Association for Lichenology (IAL) is the international society for biologists who focus their research on diverse aspects of symbiotic associations of fungi with photoautotrophic organisms. Research areas include all fields of biology, ranging from ecology and conservation to molecular biology and evolution, physiology, taxonomy and phylogeny to cell biology and interactions of partners. The IAL brings together researchers from these different areas of expertise to exchange ideas using different vehicles, such as a society newsletter and email server, field trips and, most importantly, by organizing international meetings every four years, the most recent being IAL7 held in Bangkok (Thailand). As with previous IAL meetings (five of them were held in different parts of Europe and one in the USA), IAL7 was very successful in bringing different researchers together, making it possible for students to network with international colleagues and peers. The local organizers, spearheaded by Kansri Boon-pragob, not only did an excellent job in perfectly organizing the meeting and the subsequent field trips, but also welcoming colleagues from five continents with charm and kindness.

As a representative of a generation of lichenologists that is becoming older and as one who has participated in all seven IAL meetings held so far - beginning with the first meeting in Münster (Germany) in 1986 – I cannot help but notice a dramatic change in our field of lichenology. While the first meeting was smaller, in a way more intimate, it was also very Eurocentric with only a few colleagues from North America present. Over the years the association became more international and this is reflected in the number of countries from which participants to the IAL meetings come. The most recent meetings in Bangkok attracted participating lichenologists from five continents, including a number of colleagues from surrounding Asian countries. While the earlier IAL meetings focused heavily on taxonomy and morphology, the advent of molecular techniques and the availability to use these tools to address research questions has expanded research beyond the focus of strict taxonomy. Currently, lichenologists are addressing cutting-edge research questions that were unimaginable during the first IAL meetings. However, taxonomic and floristic studies remain an important part of lichenology, particularly in tropical ecosystems. With an increasing number of lichenologists working in the tropics, it becomes more evident that there is a vast degree of unrecognized diversity that needs to be discovered and documented in order to better understand the biodiversity of these threatened ecosystems. Another aspect that has dramatically changed is the way we document and publish data. When I started to collect and identify lichens as a schoolboy, the only book available to me was a *Flechtenflora von Südwestdeutschland* by Karl Bertsch with few black and white line drawings. Needless to say, a number of my attempts to identify a lichen specimen failed miserably. I remember how happy I was when I saw the first copy of the splendid book by Volkmar Wirth. Fortunately, a lot of beautifully illustrated lichen books and websites have followed, making lichen identification for beginners so much easier than in former times. Other substantial developments have also followed, such as online databases for literature, nomenclature, online identification keys, and checklists, and make information much easier to access. These are certainly exciting times for lichenologists, and I am eager to see how our methods for communicating and sharing information will continue to change and improve. This includes the ways we communicate among ourselves and suggestions, including having internet blogs have been made and it will be interesting to see those being developed over the next years.

I want to take this opportunity to ask IAL members to let me know about ideas they might have for new ways to communicate, proposals for additional activities of the association, or other suggestions. Please feel free to email me (*tlumbsch@fieldmuseum.org*) at any time. One important part of IAL is also the organization of international excursions and I would like to invite my colleagues to submit proposals for future IAL excursions.

IAL is also active in supporting young colleagues, and we have the "Mason E. Hale Award" for the best Ph.D. thesis that is given every two years at the IAL and IMC meetings. In addition, we now have the "Margalith Galun Awards" for the best oral presentation and best poster at an IAL meeting, which were given for the first time at the IAL7 meeting in Bangkok. These awards are in addition to the "Acharius Medal" that is presented in recognition to the life work of distinguished lichenologists and the "Sylvia Sharnoff Award" is given for the best to an outstanding web page devoted to lichens. I would like to propose to the next IAL general meeting at the IMC meeting in Bangkok in 2014 that we introduce two additional awards. These awards should be at a postdoctoral level when researchers are actively seeking for a permanent position and helpful for their CVs. The awards should be restricted to applicants that have completed their Ph.D. within five years prior to the submission deadline. One award (I propose the name "Dharani Awasthi Award") should be given to a prominent young researcher working and living in a tropical country, while the other award (I propose the name "Aino Henssen award") should be given to a prominent female researcher early in her career. In this manner, we could better support lichenological research in the tropics and women in lichenology. The tropics have an enormous amount of undiscovered diversity and we should support efforts to increase the number of lichenologists in tropical countries. While the number of female students is pleasingly high, the percentage of females inhigher level positions is unfortunately is significantly less than those of male colleagues. I am sure you will agree with me that both deceased colleagues would be excellent choices after whom to name these newly suggested awards.

It is a great honour to follow Peter Crittenden in the position of IAL7 president. Peter is a wellknown and distinguished lichenologist who has demonstrated great leadership during his tenure for IAL and has spearheaded major and important revisions of the society, including the introduction of the "Margalith Galun award". He has done this great job in addition to his daily job as university lecturer and researcher and on top of his role as senior editor of the *Lichenologist*. The whole society is deeply grateful to him and his council for their outstanding service. The new IAL council is composed of Mats Wedin (Vice President), Sergio Pérez-Ortega (Secretary), Volker Otte (Treasurer), Christian Printzen (Assistant Treasurer) and Ave Suija (Newsletter Editor). Members at Large are Andreas Beck (our Webmaster), Marko Hyvärinen (Chair of the Organizing Committee for IAL8), Heidi Döring, Jolanta Miadlikowska, and Adriano Spielmann.

For me the most important part of being a lichenologist is that I have made many dear friends and met a number of interesting people over the years. Certainly, lichens attract an unusual and never boring crowd of people – I am looking forward to meet many of them at the next IMC meeting in Bangkok in 2014 and at IAL8 in Helsinki in 2016!

H. Thorsten Lumbsch, Chicago

# **New Acharius Medalists**

## Ana Crespo

Ana Crespo, Professor of Botany at Universidad Complutense of Madrid, did her Ph.D. in 1973 under supervision of the phyto-sociologist Salvador Rivas Martinez, and her lichenological teachers included Gerhard Follmann, Josef Poelt and George Clauzade. Born in Tenerife in the Canary Islands in 1948, she has always been interested in nature and her early career was devoted to phytosociology, taxonomy and floristics of Mediterranean lichens.

Needless to say her scientific achievements and her contribution to lichenology are widely known. Her first paper in 1973 was the first about lichens by a Spanish botanist for almost one century. To date she has published more than 120 scientific contributions (mainly articles and books) and is currently publishing more than 10 per annum in international reputed journals. *Cresponea, Cresporaphis* and seven species have been dedicated to her name. Some of the most prominent colleagues among Spanish lichenologist have been taught by her, including Eva Barreno and Leopoldo G. Sancho.

After spending 10 years in the Spanish Ministry of Science, she returned to science in 1993 and started to employ molecular techniques, spending two years in the Genetic Department of Universidad Complutense and more than one year at the International Mycological Institute (at CABI) in the UK to learn these. As a result she developed a strong international research group called SYSTEMOL at Universidad Complutense. Even during her administrative positions at the ministry she promoted the development of lichen studies.

If you search the citation index you will find an overwhelming long list. Her research has revolutionized *Parmeliaceae* systematics and provides a model for other groups. She was one of those who first discovered cryptic species in lichens and its relevance to lichen biodiversity and conservation; this topic is now one of the burning research topics in lichens and fungi in general. Her research contributions have changed generic and species concepts and she has provided a new perspective for *Parmeliaceae*. Her scientific contributions towards evolutionary biology are noteworthy and include several evolutionary hypothesis, such as high substitution rates in the tropics related to the shift in environmental conditions (high precipitation); most of the parmelioid lineages have evolved and diversified in the southern hemisphere etc.



Ana Crespo in field work in California, 2008. Photo by P.K. Divakar

She has also made a recent advance in the evolution and estimated divergence time of *Parmeliaceae*.

Undoubtedly Ana Crespo is one of most influential botanists in Spain, being the only botanist recently elected to be full member of the prestigious Spanish Royal Academy of Sciences. She had an important role in Spanish development of science being Director General of Universities and General Secretary for the evaluation of the scientific activities of the Spanish researchers. From these positions she made a great effort to stimulate the public budget in support research of high quality, including basic sciences and the development of the biology of organisms and ecosystems and

the preparation of monographic works on flora and fauna of the Iberian Peninsula.

Last but not least, Ana Crespo is a generous leader, and always shows concern for students and colleagues. Probably a secret in her successful life is that she is always works from 7.30 am to 7.30 pm with no siesta! Due to her scientific and administrative achievements, her awareness of almost everything about lichens, her openness to innovation in science, and her enthusiastic support to colleagues, friends and students make her a deserving recipient of the "Acharius Medal".

Pradeep K. Divakar, Madrid

#### Nomenclatural novelties dedicated to Ana Crespo

Cresponea Egea & Torrente Cresporhaphis M.B. Aguirre Aspicilia crespiana V.J. Rico Cetraria crespoae (Barreno & Vázquez) Kärnefelt Coelocaulon crespoae Barreno & Vázquez Lichenodiplis crespoae Pérez-Ortega & V. Atienza Polycoccum crespoae Váczi & D. Hawksw. Rinodina crespoae Giralt & H. Mayrhofer Thelotrema crespoae Mangold, Elix & Lumbsch Xanthoparmelia crespoae Elix, Louwhoff & M.C. Molina

based on Index Fungorum database (http://www.indexfungorum.org)

#### Leif Tibell

"The Acharius Medal is awarded for the life-work of distinguished lichenologists" and I am happy to announce that the IAL Council has honoured Leif Tibell with one of these awards. Leif Tibell is most known for his life-long monographic work on the systematics of calicioid fungi, lichenized or not – the former order *Caliciales*. He became interested in these lichens even as a schoolboy in the late 1950s. He met the famous lichen taxonomist Gunnar Degelius through the Botanical Society in Gothenburg where Leif grew up. Degelius recognized the potential in this young schoolboy and became an important mentor for him, inviting Leif to his home for dinner and lichen-determination session – Leif, stuffed with food and drink, carryied home enormous piles of books and reprints, with the recommendation that for serious studies in lichenology he should study botany at Uppsala University.

Leif started in Uppsala in 1963, and after some years of botany he continued with chemistry where he joined a successful organic chemistry research group that included Johan Santesson. Here Leif wrote his first scientific publication (1966) on the identification of aliphatic lichen acids by thin layer chromatography. However, Leif possibly spent most of his time on the other side of the road where Johan Santesson's father Rolf Santesson was Curator of the Herbarium at the Botany Department. Rolf became Leif's second main mentor



*Leif Tibell in field studies in Himalaya, 2010. Photo by S.* Savić

and supervisor in his Ph.D. studies which focussed on calicioid or mazaedia-producing fungi in a wide sense.

Leif produced a large number of monographs and regional revisions of different calicioid groups, including several papers of considerable importance to lichen and fungal systematics in general. On of his most influential contributions is his 1977 paper "A re-appraisal of the taxonomy of *Caliciales*" where he provided convincing evidence that this, once the prime example of a supposedly monophyletic group among fungi, was in reality strongly polyphyletic. He also predicted the phylogenetic affinities of a number of diverse calicioid groups, most of which have been found correct by later molecular investigations. Another very important contribution outside of systematics is his 1992 paper "Crustose lichens as indicators of forest continuity in boreal coniferous forests" where he provided the scientific foundation for employing various crusts, a most important step in boreal coniferous forest conservation. Leif has been instrumental in guiding forest conservationists in Scandinavia and elsewhere in the knowledge of the useful and beautiful small pin-lichens.

In his work, he has always been very early to adopt new technical advancements - a theme already in his early papers was ultrastructural spore ontogeny studies, particularly the development of the spore ornamentation. These studies were started at a time when there were only

handful of TEM microscopes in Sweden, but one was luckily in the neighbouring department. He quickly adopted both numerical-phenetic and phylogenetic approaches to systematics in the 1970s. Later, he invested enormous efforts in the cultivation of mycobionts, and showed that many calicioids produced a variety of anamorphs. Recently, he initiated a large study of the *Verrucariales* in Sweden and co-authored some of the earliest phylogenies of the group. Leif has spent the whole of his university career at Uppsala, where he has supervised a number of master and Ph.D. students. More recently he retired from his professorship to look forward – as we hope – to an active retirement where administrative burdens do not prevent him from spending more time on lichens.

My own memories of Leif are very much connected with the joint fieldwork we did during my Ph.D. studies, namely a fantastic journey through southern Chile and Argentina in 1989, and in New Zealand in 1990 and 1992, where I particularly remember a dramatic incident when we were forced to cancel an excursion in the forest at midday due to extremely heavy rain, only to find that the bridge we had crossed with the car in the morning was now in the middle of an enormous river. We just had to get back – our tent was on the other side – and we took the risk of driving with high speed through the river towards the bridge which of course resulted in engine failure. So there we were, sitting in the car in the river; I do not remember which us opened the door to check how high the water level was, but I do remember climbing through the side window onto the car roof to try to attract attention and help. At the last minute Leif managed to get the engine running again so we could get onto the bridge and over to the other side with our precious collections safe.

It was Erik Acharius himself who produced a series of treatments of calicioid lichens (*Plantae Calicioidea* 1815-1817), in fact one of the very earliest taxonomic monographs in lichenology. It is very fitting that Leif, who can be seen as a descendant of Acharius through a number of Swedish lichenological teacher/student generations, is today presented with this medal. I am certain that Acharius would greatly approve!

Mats Wedin, Stockholm

#### Nomenclatural novelties dedicated to Leif Tibell

Leifidium Wedin	Diorygma tibellii Kalb, et al.
Tibellia Vězda & Hafellner	Hypotrachyna tibellii Elix, et al.
Bunodophoron tibellii (Wedin) Wedin	Lecanactis tibelliana Egea & Torrente
Caloplaca tibellii S.Y. Kondr. & Kärnefelt	Phaeocalicium tibellii Kalb
Chaenothecopsis leifiana Titov, et al.	Plectocarpon tibellii Ertz & Diederich
Chaenothecopsis tibellii Titov	Pronectria tibellii Zhurb.
Chapsa tibellii Mangold	Rinodina tibellii H. Mayrhofer
Choreospora tibellii Constant. & R. Sant.	Xanthoparmelia tibellii T.H. Nash & El
Dimerella tibellii Vězda	Xanthoria tibellii S.Y. Kondr. & Kärnet

Sant. Xanthoparmelia tibellii T.H. Nash & Elix Xanthoria tibellii S.Y. Kondr. & Kärnefelt

based on Index Fungorum database (http://www.indexfungorum.org)

# Mason E. Hale Award

## Francesco Dal Grande

"Mason E. Hale Award" for 2012 is given to Francesco Dal Grande for his thesis *Phylogeny and co-phylogeography of a photobiont-mediated guild in the lichen family Lobariaceae* which was accepted for the degree by the Universität Bern in June 2011. Although there have been several studies examining either the fungal or the photosynthetic partners in lichens using molecular biology at the population level, none have studied both at the same time. Francesco has done this, and in depth, for *Lobaria pulmonaria* and at a variety of geographical scales, from the continental to the local population. Microsatellite data were obtained from an amazing 9000 or so specimens – and in 3.5 years. He found that *Dictyochloriopsis reticulata* was not confined to the species, and that it was clonal and dispersed vertically in populations through

dual propagules. Sexual recombination in the fungus did occur, but rather rarely, and in Macaronesia, for example, different *Lobaria* species in a particular habitat were found to share the same algal genotype. A hot-spot for diversity in the lichen was identified using a centroid approach, new for lichenology; this was in southern Italy and the Balkan area which seem to have been a refugium for the species.

The following comments from the supporting letters and committee members indicate the high regard in which Francesco's study is held: "This is



Award ceremony in IAL7. Former IAL president Peter Crittenden (left) and Fransesco Dal Grande (right). Photo from IAL7 web page

among the most solid Ph.D. dissertations on lichen biology that I had the opportunity to read." "The magnitude of the work accomplished here is phenomenal." "This work sets a new standard on how to analyze molecular data to understand lichen ecological genetics." "The discussion is sound, demonstrating high logical skills and profound knowledge of the literature." "The work of Dal Grande may influence our way of thinking about lichens." "Francesco's research bespeaks an utmost adherence to the highest levels of quality and promises that this young scientist will continue in the tradition of leadership in excellence that has been the hallmark of past awardees."

I thank my colleagues on the IAL Mason E Hale Award Committee 2010-12 (Richard Beckett, Martin Grube and Christian Printzen) for their assistance in reaching this conclusion, and wish Francesco all success in the post-doctoral position he started in November in Frankfurt-am-Main. I will personally look forward to his future elucidations of population biology in lichens, and only regret that personal circumstances preventing my being present on this occasion.

David L. Hawksworth, London

# **REVIEWS**

### IAL7 – A perspective

In an attempt to place the magnificent IAL7 meeting in Bangkok into an historical context, I reread Ingvar Kärnefelt's engaging history of the International Association for Lichenology. I was struck that we lichenologists have only had our own formal meetings since 1989 with the first IAL Symposium held in London. Before that, we were content to organize a few lichenological sessions at the International Botanical Congress, and later, at the International Mycological Congress. True, the IAL organized wonderful field meetings much earlier, in fact quite soon after it was officially established in 1969, the first one in 1973 to the Alps being organized and led by Josef Poelt and Maximilian Steiner.

Interest in tropical lichenology, however, was building. The second IAL field meeting was held in tropical Costa Rica over the Christmas holidays in 1978–1979. Almost all the participants were from Europe or North America, but none were from a tropical country. The focus of IAL1 in London was again on Tropical Lichens, but once again very few lichenologists from tropical countries attended, since it was an expensive trip from most parts of the tropics where most countries had very modest research budgets, and there were actually very few lichenologists in tropical countries at that time. Robert Wingfield wrote a very frank and worthwhile assessment of the state of tropical lichenology in 1989 (http://www.lichenology.org/Publications/ ILN/ILN\_23\_1.pdf) pointing out that only 10 of the IAL's 440 members were from tropical areas. How times have changed! In Bangkok, we discovered that many tropical countries have new lichenological programmes, students and facilities. Research on tropical lichens is not only done by Europeans, but also by South Americans and Southeast Asians, and we can see the beginnings in similar work in Africa and Central America. Robert Lücking's series of workshops on tropical lichens in Costa Rica have undoubtedly helped establish this trend. Thanks, in part, to funding by the IAL and the British Lichen Society, many young researchers from South and Central America, Africa and Southeast Asia were able to make the trip to Bangkok, which itself is in a tropical country. Most of us were astonished (and delighted) to discover that there are over two dozen lichenological students in Thailand alone, and we met many of them at the meetings.

And yes, Bangkok is tropical. The temperature during the 5-day winter meeting varied between 28 and 32°C, and there was barely a sprinkle of rain to dampen the spirits. The symposium was organized in such a way as to maximize interactions among participants. The poster area was always crowded, and the animated discussions often made it difficult to find time to actually study the posters themselves. (I speak for myself.) But the fascinating posters, of course, were the catalysts for these discussions. The generous coffee breaks provided more opportunities for chats with colleagues, new and old... and the coffee and snacks were marvellous! I suspect there were many other informal lichenological discussions held elsewhere over a beer or two, but hopefully not while the talks were going on, because the papers were so interesting and of high quality.

There were plenty of papers on systematics (virtually all based on molecular techniques), but

there were lots of other subjects covered as well. Most of us tend to be interested in many aspects of lichen biology, which must have made it a challenge for organizers to avoid obvious conflicts between concurrent sessions, and made for some difficult choices for participants. I was reminded of my first big international meeting, the 1964 International Botanical Congress in Edinburgh, and my excitement at hearing ground-breaking talks by David Smith on nutritional interactions between symbionts, and by Helmut Gams on equally fascinating new findings on basidiolichens; the taxonomic papers were also stimulating, and I was keenly aware of the presence of the giants of lichenology – for a beginner in the field (I was still in my 20s), it was pretty heady stuff. It would surprise me if the students at the Bangkok conference didn't have similar feelings.

I found both the IAL7 talks and the posters polished and informative, thanks to the hard work of the presenters and, one must add, the wonders of *Powerpoint*. As a taxonomist of the older generation, I will admit to being somewhat bewildered by presentations describing and explaining the many adjustments being made to the long-accepted alignments of species, genera and families among the lichenized fungi. There was a time when these changes made me feel threatened, but DNA-based phylogenies are being done more cautiously these days, and, indeed, that was the subject of several of the papers at this symposium. The "Ah ha, so *that's* where that genus fits" moments far outnumbered the "No way they're going to take *that* genus out of that family" moments. The people I met at IAL7, and the papers and posters they presented, make me reiterate with even more confidence, that the future of lichenology is looking very good indeed.

Irwin M. Brodo, Ottawa

# **Reflections on IAL7**

Scientific meetings provide an opportunity to put a face to publications and emails, perhaps your next collaborator, an important step in your career as a scientist, or a lifetime friend. IAL7 in Bangkok was for both of us, as Ph.D. students, the second IAL meeting we attended. Be it in Bangkok, Asilomar or Edinburgh, the truth is that the summer camp feeling is sometimes difficult to repress. After the oral presentations were finally delivered, nights ended rather late, surrounded by friends and colleagues, involved in conversations that took more and more intriguing perspectives on lichenology, the universe and everything as the evening went by...

The congress was very well organized, not even the cold air from the fans masked the warmth and friendliness of the staff, which was only rivalled by those people we met outside the congress. The cultural programme was one of the highlights, and the welcome party turned out to be spectacular full of excellent music, dancing performance and food.

The community of lichenologists attending was without a doubt the highlight of the meeting. On the one hand there was a large attendance of Asian colleagues, not always present (and dearly missed) when meetings take place outside their operating range. This time we had the chance to meet lichenologists from Indonesia, Thailand, India, Japan, etc. and to experience both the maturity and the expansion of lichenology in the Asian continent. On the other hand, the generational structure of a scientific community is made visible at such congresses. Some scientific disciplines have notoriously aged communities with very little replacement, while others meetings witness the eruption of young scientists "holding the methodological keys to a new era". Fortunately in lichenology, we have a lot of both, and among other things, the structure of the IAL executive committee reflects this.

From a scientific point of view, it is difficult to make a selection of IAL7 contributions since there were many excellent and interesting contributions from student, junior and senior scientists, and furthermore one has to take into account that the best talks were probably the ones we missed, being held in a simultaneous session. However, we had our attention drawn to the keynote lecture of Pier Luigi Nimis, which was enlightening in respect to how technology is changing botanical research. From a different perspective, we got really enthusiastic by the complex regulation mechanisms of lichen function hinted in the posters presented by Makiko Kosugi (Tokyo) on desiccation tolerance, and fungal regulation of the algal photosynthetic performance. We were also carried away by the results of the increasingly deep survey of endolichenic and endophytic communities presented by Jana U'Ren (Tucson), which contributes to understanding lichens as broad, and partly open ecological systems.

As a final remark, we would like to express our gratitude to the organizers of the IAL7 for their effort, and to the Editorial board for giving us the means to express our opinions.

Stephanie Domaschke and Fernando Fernández-Mendoza, Frankfurt am Main

# REPORTS

# The eastern route to Trat Province, 14-18 January 2012

Following the 7th IAL symposium, colleagues of the Ramkhamhaeng University organized an excursion to the mangroves. On Saturday, about 30 people left Bangkok in small buses to journey to Trat Province in the south-east of Thailand which lies close to Ko Chang, the third biggest island of the country and near the border of Cambodia and is not really touristic, probably one of its most attractive features.

The first day was mostly spent on travel, but delighted in the beautiful nature and villages of the different regions we passed through. We stopped for lunch in a Medical Science Herb Garden in Rayong Province, where we were shown how Thai people use diverse plant species for medical and cosmetic needs. In the late afternoon we arrived at our beautiful accommodation, the Ban Pu Resort, near to mangrove forest and the sea. Ready to fight against the "vampire" mosquitos, we spent the night to become acquainted with the organizers, the participants of the excursion and of the *Graphidaceae* and *Tropical Lichens Workshops* that were held in the same area.

On Sunday morning we left the resort suitably dressed to "plunge" in the mangrove forest (Photo 1), and came out where trees kiss the ocean, from where we sailed back in small fishermen boats. In the afternoon we visited a local village to try traditional products and were introduced to mollusc fishing.



Photo 1: Our first acquintance with mangroves ... Photo by A. Suija

On Monday we visited the mangrove forest of the new visitor centre of Had Sai Dum (Black Sand Beach) where we had the opportunity to collect lichens in the forest and relax under the sun for a short period of time. After lunch we went to the Sepang Hin Waterfall in a tropical rainforest close to the Cambodian border to collect lichens from various habitats. It was very hot and humid: perfect conditions to rest close to the torrent with our feet in the water!

On Tuesday some of our group enjoyed further boat trips with the fishermen in order to observe some birds around the mangrove forest and to fish another type of mollusc...by means of their feet! Afterwards, we went to a special area of the forest to plant young mangrove trees. This experience was very exciting and amusing, since some people lost their boots or became stuck in the sandy ground (Photo 2). Some participants visited the city of Trat Province in the afternoon for sightseeing and shopping, but heavy rains stopped the tour, and the remainder relaxed at the Ban Pu Resort.

All visited locations showed a great diversity of lichens; several species (particularly those of the *Graphidaceae*, *Pertusariaceae* and *Pyrenulaceae*) unknown to our group were collected were thankfully determined with the help of the leaders of the *Graphidaceae* and *Tropical Lichens Workshops*. These findings enriched our days, reminding us why we took so many miles to get to Thailand, a special country not only for its culture but also for its lichens.

On the last day, on our return to Bangkok, we had time to enjoy a fruit market and a sunny beach; the weather was so nice, the water so warm and the place so beautiful, that we made the most



Photo 2: Planting of mangrove trees for reafforestation. Photo by C. Hametner

of this last part of summer before many of us returned to colder climates! Then, unfortunately, we had to say goodbye to this beautiful country and to new good friends with the promise to keep in touch.

Christina Hametner, Salzburg and Stefano Bertuzzi, Trieste

# The Himalayan foothills lichen tour, 14-19 January 2012

The young, mesozoic mountain ranges guarding Thailand's northern border, known as the Himalayan foothills, are an alluringly rugged and opulently green region offering some of the finest views in this mostly lowland country. It is an attractive destination for tourists and scientists alike, its majestic natural beauty, abundant animal and plant life and unique local culture casting a lasting spell on visitors.

We were fortunate to explore these foothills during a six-day tour which followed the 7th International Association for Lichenology Symposium in Bangkok. Our group of 31 lichenologists from 13 countries landed at Chiang Mai airport on Saturday 14 January 2012. The crisp northern air made us gasp after the hot, subequatorial climate of Thailand's capital. After a sumptuous meal of rice, local vegetables and devilishly spicy curry with aromatic lemon leaves, we visited the Forest Restoration Research Unit at Chiang Mai University. The unit,



Participants of the Himalayan foothills tour. Photo by T. Tõrra

which opened in 1994, has been working hard to restore degraded tree stands in the north of the country. A tour of the laboratory gave us a glimpse into its efforts to regenerate Thailand's forest resources and ecosystems. The day ended with a moment of respite and reflection at the Wat Phrathat Doi Suthep, one of the most important Buddhist temples in Thailand. Constructed on Doi Suthep by King of Lanna in 1385 at the site where a holy elephant carried the bone of Buddha, it is now part of the Pui National Park.

Sunday was an unhurried day of work and leisure which took us to the Queen Sirikit Botanic Garden, the oldest botanic garden in Thailand in the foothills of Doi-Suthep-Pui Mountain in Chiang Mai. The garden, of almost 1000 hectares, encompasses large tropical deciduous forests which are a refuge for such dipterocarp species as *Dipterocarpus costatus*, *D. obtusi-folius*, *Shorea obtusa* or *S. siamensis*. Not surprisingly we made our first collections here. We were overwhelmed by a variety of epiphytic species and admired saxicolous lichens growing on occasional rocks.

The following day we went to Doi Inthanon (2565 m), Thailand's highest peak. Formerly known as Doi Ang Ka, the summit is part of the Doi Ithanon National Park, southwest of Chiang Mai. The view from the mountain took our breath away as we examined the rich lichen biota. We were also invited to the Royal Agricultural Station Inthanon, where we saw a variety of locally produced hydroponic goods. The day ended with a tour of the Phra Mahathat Nopphon Pumisiri Pagoda, erected to commemorate Queen Sirikit's 60th birthday in 1992.

On Tuesday and Wednesday we were based at a scenic place near Ban Pang Iak village in order to focus on field investigations in the Mae Tang District, a typical area, rising to 1250-1400 m, of evergreen montane forests interlaced with tea plantations. Here, *Castanopsis, Magnolia, Shima* and species of the family *Lauraceae* delight the eye, and epiphytic lichens, particularly species of *Brigantaea*, *Hypotrachyna*, *Leptogium*, *Parmotrema*, *Pertusaria* or *Usnea*, abound-ed.

Although our bags were full of collections and we were sorry to leave the site, yet another treat awaited us when we explored the Chiang Dao Cave, a karst cavern, which penetrates Thailand's highest calcareous massif, Doi Chiang Dao (2175 m). This cave offers a complicated 14 km system of corridors and passages, enshrined in myths and legends.

We reluctantly returned to Bangkok on Thursday. The smooth flow of the thoughtfully planned excursion and the arresting beauty of the foothills made the tour unforgettable would not have been possible without the friendly efficiency and professional commitment of the organizers and their assistants: Sureeporn Jariangprasert, Wanaruk Saipunkaew, Santi Watthana and Thitiporn Pooprang. They did their outmost to delight and surprise us. Their hard work and cheerful spirit made the trip a true highlight of the Symposium and provided rich material for future research.

Adam Flakus, Krakow and Pamela Rodriguez Flakus, Frankfurt am Main

# IAL7 North-East excursion: dipterocarp forests as viewed by a lichenologist and conservation biologist

To choose Himalaya, mangrove or dipterocarp forests route? This is a problem if you haven't seen either of them before, since theorethically all three should be interesting as lichens habitats. Finally, I selected the NE-route to experience dry tropical forests as they are known to be an even more threatened ecosystem than wet tropical forests due to very intensive land use for plantations that leads to irreversible habitat degradation and extinctions of species.

During two days, our small excursion group (14 persons) leaded by Khwanruan Papong ("Poo") and her team, visited dipterocarp forest sites at sandstone hills close to Phu Pha Kud village in Mukdahan Province, NE-Thailand. My dream to see old-growth forest was not fulfilled, as they do not exist within hundreds of kilometers of our study area, although lichens (albeit in modest diversity) did occur in the secondary young dipterocarp forests. Here we found (and studied) common species, such as *Pyxine coccifera*, *Laurera benguelensis* and *Parmotrema tinctorum*, and to my joy I found even a calicioid (*Calicium* spp.) growing in bark crevices. Having my first tropical experience, I was amazed by the speed of growth of trees and lichens, 5-year old gangly dipterocarp trees, for example, supporting notably rough bark and large lichen thalli. However, it was a tricky task, even to our botanical specialist, to name the species of phorophytes, and I realised how easy it is to make lichenological-ecological studies in (hemi-)boreal forests.

Being also a conservation biologist, I was interested in land use and social aspects too. The places we visited, belonged to the local village community and they earn most of their living



Group photo at Kung Nam restaurant next to Chi river in Maha Sarakham

from the forest. Step by step forests at lower parts of the hills had become eucalyptus, cotton, cassava or rubber tree (*Hevea*) plantations. Forests are retained only on hill tops, but even these are frequently cut to supply construction material for local houses or for sale at the market. Despite prohibitation, trunks of valuable tree species are still cut down for sale in illegal Chinese furniture markets.

After leaving the forests (using local transport Ae-Tak), we were quests at Phu Pha Kud village temple square. Local women in their national costume showed us Phy Thai dance, the oldest woman of the village leading the special friendship rite: we were asked to keep a boiled egg in our hand (later it should be eaten) and locals bound our wrists with a natural cotton thread, whilst special words were recited. For many years, I have not experienced so many sincere smiles and wishes for happiness as I felt during these 15 minutes.

The IAL7 excursion to the dipterocarp forests showed me, in addition to interesting beautiful lichens, that the link between nature protection, management and social aspects is very close.

Piret Lõhmus, Tartu

# IAL7 Tropical Lichen Workshop

The post-conference workshop on tropical lichens, held at the beautiful Ban Pu resort in Southeast Thailand, was directed by André Aptroot and Felix Schumm, who have a lot of experience in collecting, identifying and photographing lichens in tropical areas. The aim of the workshop, with 16 participants from 12 countries, was to learn how to collect and identify various lichen families, with the emphasis on crustose species. The first two days started with a collecting trip to different mangrove forest sites, and the afternoon sessions were dedicated to identification. As the knowledge of the Thai lichen flora is still increasing, no complete flora or key is available for identification. Therefore, identifying lichens requires a vast amount of resources, such as monographs, floras and checklists of other countries, articles describing one or more new species, photo-books and websites for correct identifications or to deduce the name most likely for the collected species. With about 300 person-hours of searching only 0,2 km<sup>2</sup> of forest, over 80 lichen species were found, including several new for Thailand, such as *Bactrospora metabola* and *Enterographa divergens*. With the help of many students of Ramkhamhaeng University, participants were able to send home their 20 to 50 specimens as a reference collection or for futher study.

Laurens B. Sparrius, Gouda



Participants of the Tropical Lichen Workshop at the mangrove forest in Had Sai Dum. Photo by S. Santanoo

# **OBITUARIES**

## Vernon Ahmadjian

19 May 1930 - 13 March 2012



Dr. Vernon Ahmadjian died peacefully at the Falmouth Hospital on March 13, 2012. Vernon Ahmadjian, the son of Armenian immigrants, Nishan and Annie (Ohanian) Ahmadjian, was born and raised up in Whitinsville and lived over 40 years in Worcester (both in Massachusets, US). He was educated at Clark University, where he got his B.A. in 1952 and M.A. in 1956. Between these two degrees, he served two years in military service with the US Army Combat Medical Corps in Korea. In 1960, he received Ph.D. degree from Harvard University.

Vernon's subsequent academic career included various academic posts at the University of Massachusetts, University of California at Berkley and, at Clark University. Much of his career was spend at Clarke university in Massachusetts which is small with very limited science facilities. In spite of this Vernon was able to tackle a problem, the resynthesis of lichens from their fungal and algal components, that had not been addressed since the late 1800s. From 1962 he began to make major contributions including the development of techniques to isolate and culture the lichen symbionts in the laboratory. He, with the assistance of honours and graduate students, was able to establish the conditions required for the successful re-establishment of the lichen symbiosis. As a result they made numerous discoveries on the nature of lichen symbiosis. Vernon authored and co-authored numerous research papers and books, among them The Lichen Symbiosis in 1973 and Symbiosis: An introduction to Biological Associations co-authored with Surindar Paracer in 1986. He also provided the National Cancer Institute with special lichen cultures for screening programs designed to identify cancer and AID-fighting compounds. In 1996 Vernon Ahmadjian was honored with "Acharius medal" for his pioneering research on lichen symbiosis. Vernon was an outstanding lecturer and became an invited speaker at conferences and congresses in many countries. His charm and friendly interactions with colleagues endeared him to lichenologists around the world.

Vernon Ahmadjian was for many years the editor of the International Lichenological Newsletter. He was very active in both the executive committees of the IAL and the ABLS. Vernon was a wonderful correspondent with fellow scientists. The ease with which we now communicate via the internet would have been a huge time saver for Vernon during the 1970's and 1980's when he was most active. Vernon spent a lot of time on formal correspondence and it is nice to know that his papers are all preserved in the Harvard University library. Vernon knew where every rare lichen occurred in his County in Massachusetts. He worked hard to get many of these locations protected from development.

Vernon was a champion for his local natural plant communities and, in addition to his books on lichens, he wrote a book on *Flowering Plants of Massachusetts* in 1979. I was his teaching assistant for a *Local Flora* class and together we visited many great wildflower spots in Massachusetts. The students loved these field trips that often passed ugly factories and garbage dumps only to reveal beautiful spots of nature by spring feed rivers and rock outcrops! Vernon was the classic, serious professor who could make something as simple as knowing the number of petal on Bluest, or which family a wildflower belonged to, sound so very important. He will certainly be missed by all who knew him.

Roger Rosentreter, Boise (Idaho) and David Richardson, Halifax

## Vernon Ahmadjian Books

Ahmadjian, V. 1967. The Lichen Symbiosis. Blaisdell Publishing Co., Waltham, MA. 152 pp.

- Ahmadjian, V. 1979. Flowering plants of Massachusetts. University of Massachusetts Press. 582 pp.
- Ahmadjian, V. 1993. The Lichen Symbiosis. John Willey and Sons, Inc., NY. 250 pp.
- Ahmadjian, V. & Hale, M.E (eds.) 1973. The Lichens. New York: Academic Press. 697 pp.
- Ahmadjian, V. & Paracer, S. 1986. Symbiosis: An introduction to Biological Associations. Hanover, N.H., University Press of New England. 212 pp.
- Paracer, S. & **Ahmadjian**, V. 2000. Symbiosis, An Introduction to Biological Associations. 2nd Edition. Oxford University Press. 291 pp.

#### Maria Ciurchea

12 April 1931 – 19 May 2012



Maria Ciurchea, a Romanian botanist and lichenologist, passed away on 19 May in Cluj-Napoca (Romania) after a heart attack. She was born in Babeni-Oltet, Vâlcea in Romania on 12 April 1931. She undertook her higher education in Natural Sciences at the Babes-Bolyai University in Cluj-Napoca (1949–1953) where she continued her academic career, first as assistant professor in botany in the Faculty of Biology and Geography (1953–1968), and then as associate professor in pedagogy in the Faculty of History and Philosophy (1969–1989). In 1990, she returned to the chair of botany and worked there as associate professor until her retirement in 1992. Her Ph.D. thesis in 1964 was on the *Flora of the Vâlcea*.

During her career, she published three monographs and 64 articles in peer reviewed journals of psychopedagogy, botany and lichenology. In recent years, she was concerned with updating the Romanian lichen checklist (see: http://www.bgbm.org/BGBM/STAFF/Wiss/Sipman/Zschackia/Rumania/intro.htm) and compiling a key work on Romanian lichens *Determinatorul lichenilor din România* published in 2004. She described two lichen species – *Pertusaria transilvanica* Ciurchea and *Lecanora vidraensis* Ciurchea. From her collecting activities, more than 1500 lichen and plant specimens are preserved in the Herbarium of the Babes-Bolyai University (CL).

The Editor (based on information provided by her son)

# NEWS

# Permanent exhibition of lichens, mosses and tree fungi in Tallinn Botanic Garden

Lichens, mosses and tree fungi are well suited for all year round outdoor display, as they are relatively resistant to extreme weather conditions. However, these very interesting and widely distributed organisms are not well known even among school teachers.

In 1999, an exhibition in Tallinn Botanic Garden consisting of more than 200 most widespread species of lichens, mosses and tree fungi in Estonia, was exhibited in wooden plant containers. By the autumn of 2009, when this permanent exhibition was removed due to the construction of a new greenhouse, several hundred thousand visitors had seen it. In autumn 2012, a new permanent exhibition was opened in a new position beneath tall trees of oak and pine. The exhibition, renovated by the support of the Environmental Investments Centre (EIC) of Estonia, features 60-70 of the commonest Estonian species of lichens, mosses and tree fungi. The Estonian specialists Ave Suija, Leiti Kannukene, Sulev Järve, Merlyn Pajur and Siiri Liiv prepared explanatory posters and worksheets for students.

Visitors to the exhibition can, for example, learn about the differences between lichens and mosses, the best known medicinal lichens in Estonia, for what purposes mosses could be used, and that the largest living organism on the Earth is probably a fungus. As the exhibition is exposed to the wind, sun and rain, part of it still gets damaged and needs repeated renewal during the spring and summer months.

Siiri Liiv, Tallinn



Entrance to the exhibition (left), reindeer-lichens in wooden outdoor containers (right). Photos by S. Liiv

# **BOOK REVIEWS**

# TSURIKOV, A.G. & KHRAMCHENKOVA, O.M. (2009): Foliose and fruticose city lichens: an illustrated guidebook – Gomel: UO "Gomelskij gosudrastvennyj universitet im. F. Skoryny". 124 pages. Hardback. ISBN 978-985-439-390-2. (in Russian). Price: not indicated.

Very few Belorussian publications have reached the lichenological community during the last two decades, therefore it was a pleasant surprise to review this book. Published as a handbook for university students, it can be successfully used by any beginner in lichenology, wherever Russian language is used. The book is in attractive format (though not so convenient if in field), and covers the commonest Belorussian macrolichen (mainly epiphytic) species. Every species is provided with short description in morphology, chemistry and ecology and complemented by photographs of sufficiently high quality. There are no scales to the photographs, but usefully, fragments of thallus are photographed in different magnifications, highlighting important characters. The book starts with an exhaustive and well-illustrated introduction into lichen morphology, anatomy, systematics, conservation, ecology, and field and laboratory work. A key, running to over 10 pages is well illustrated – every step is provided with one or two small photographs of a feature or species making it very useful for those first acquainting themselves with lichens.

Jurga Motiejunaite, Vilnius

# NOTOV, A.A., HIMELBRANT, D.E., URBANAVICHUS, G.P. (2011): The list of lichens and allied fungi of Tver region. – Tver: Tver State University, 124 pages + 1 colour plate. Paperback. ISBN 978-5-7609-0698-4. (In Russian). Price: not indicated.

This book is part of a larger project towards aimed at a better understanding of the whole Russian lichen flora. Tver oblast is situated in the central part of European Russia, c. 150 km from Moscow. Phytogeographically, the territory of the Tver oblast belongs to the southern taiga subregion with huge areas of tall coniferous forests. The book is based on nine years fieldwork by the authors, as well as on literature sources. 527 species are listed, with notes on their regional distribution, ecology and frequency. Species listed in the regional Red-List as well as in Russian Federation are also indicated. Descriptions of the localities of very rare species are indicated, and detailed distribution maps of some species (e.g. *Arthonia leucopellea, Cliostomum leprosum, Evernia divaricata* and *Menegazzia terebrata*) in the region of the River Mezha are provided. A frequency map of *Lobaria pulmonaria* is also illustrated. The book concludes with a list of the main collectors from the region and their collections. It is worth mentioning that the first collections from the region, preserved today in the lichen herbarium of the Komarov Botanical Insitute, were made in the middle of the 19th century.

The Editor

# PERSONALIA

**Erast Parmasto**, Estonian mycologist working mostly with corticiod fungi passed away on April 24th 2012 at the age of 83. At his young age, he was also keen on collecting lichens. His lichen collections are now preserved in the lichen herbarium of the University of Tartu (TU). Among his scientific inheritance, there are several papers about basidiolichenes. His complete bibliography is available in *Folia Cryptogamica Estonica* 49 accessible at http://www.ut.ee/ ial5/fce/fce49.html.

The "Sylvia Sharnoff Education Award" assigned in IAL7 was given to **Mohammad Sohrabi** for developing of *Myco-Lich* web-site accessible at http://www.myco-lich.com/.

The "Margalith Galun Award" for the best student's poster presentation was given to **Ulla Kaasalainen** (University of Helsinki) for *Symbiotic cyanobacteria produce a series of hepa-toxins in lichens* and for the best student's oral presentation *Changes in epigeic lichen commu-nities in calcareous grasslands (alvars) due to cessation of traditional land use* to **Ede Leppik** (University of Tartu).

**Mohammad Sohrabi** defended his Ph.D. thesis *Taxonomy and phylogeny of the manna lichens and allied species* (Megasporaceae) in University of Helsinki on January 27th 2012.

**Martin Kukwa** obtained *Dr. Hab.* on his thesis *The lichen genus* Ochrolechia *in Europe* on February 17th 2012 in Gdansk University, Poland.

**Ljudmila V. Gagarina** (St. Petersburg, Komarov Botanical Institute ) defended her Ph.D (Cand. Biol.) thesis on March 14th 2012 on *Lichens from the order* Gyalectales *Henssen ex D*. *Hawksw. & O. Eriksson in extratropical Eurasia.* 

**Anna O. Voytsekhovich** (M.H. Kholodny Institute of Botany, National Academy of Sciences of Ukraine, Kyiv) defended her Ph.D. thesis *Algal component of lichens of Karadag Nature Reserve*.

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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* 

Journal: Australasian Lichenology, web-page: http://nhm2.uio.no/botanisk/lav/RLL/AL/

**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 (institute), 218-5209 (home), e-mail: *mpmarcelli@msn.com* 

**Central Europe:** Bryologisch-lichenologische Arbeitsgemeinschaft für Mitteleuropa (BLAM). Contact: Volker John, Pfalzmuseum für Naturkunde, Hermann-Schäferstraße 17, D-67098 Bad Dürkheim, Germany, e-mail: *V.John@pfalzmuseum.bv-pfalz.de*, web-page: http://www.blam-hp.eu/home\_en.html

Journal: Herzogia, web-page: http://www.blam-hp.eu/herzogia.html

**Czech Republic:** Bryological and Lichenological Section of the Czech Botanical Society. Chairperson: Ivana Marková, e-mail: *i.markova@npcs.cz*, web-page: http://botani-ka.bf.jcu.cz/bls/english/index.html

Journal: Bryonora, web-page: http://botanika.bf.jcu.cz/bls/english/bryonora\_en.php

**Finland:** Lichen Section, Societas Mycologica Fennica. C/o: Botanical Museum (Lichenology), P.O. Box 7, FI-00014, Helsinki University, Finland. Info: Teuvo Ahti, e-mail: *teuvo.ahti@helsinki.fi* 

Journal: Karstenia, web-page: http://www.karstenia.fi/index.php

**France:** Association Française de Lichénologie (AFL). President: Claude Roux, e-mail: *claude.roux21@wanadoo.fr*, web-page: http://www2.ac-lille.fr/myconord/afl.htm.

Bulletin: *Le bulletin d'information semestriel de l'AFL*, web-page: http://www2.ac-lille.fr/ myconord/Afl/Publications\_afl.htm

**Great Britain:** The British Lichen Society (BLS). C/o: Department of Botany, The Natural History Museum, Cromwell Road, London SW7 5BD, UK. President: Dr. B. Hilton, membership contact Heidi Döring, e-mail: *h.doring@kew.org*, web-page: http://www.thebls.org.uk/

Journal: *The Lichenologist* (accessible via *Science Direct* http://www.sciencedirect.com/); *British Lichen Society Bulletin* 

**Italy:** Società Lichenologica Italiana (SLI). President: Stefano Loppi, Dipartimento di Science Ambientali "G. Saratti", Universita di Siena, Via P.A. Mattioli 4, I-53100 Siena, e-mail: *presidente@lichenologia.eu*, web-page: http://www.lichenologia.eu/

**Japan:** The Japanese Society for Lichenology (JSL). President: Kunio Takahashi, contact email (secretary): *kawahara@kansai-u.ac.jp*, web-page: http://www.lichenology-jp.org/index.php/en/

Journal: Lichenology, web-page: http://www.lichenology-jp.org/index.php/en/journal/

Lichenological Society of Japan (LSJ). Secretary: Nobuo Hamada, e-mail: *MXI00715@nifty.com*, web-page: http://home.hiroshima-u.ac.jp/lichen/aboutlsj.htm

**The Netherlands:** Dutch Bryological & Lichenological Society (Bryologische + Lichenologische Werkgroep, BLWG). Contact: J.W. (Jan) Pellicaan, contact e-mail: *info@blwg.nl*, web-page: http://www.blwg.nl

Journal: *Buxbaumiella*, web-page: http://www.blwg.nl/mossen/buxbaumiella/buxbaumiella.aspx

**Nordic Countries:** Nordic Lichen Society (Nordisk Lichenologisk Förening, NLF). Chairman: Ingvar Kärnefelt, e-mail: *Ingvar.Karnefelt@biol.lu.se*, web-page: http://nhm2.uio.no/ lichens/nordiclichensociety/

Journal: Graphis Scripta, web-page: see NLF web page

**North America:** American Bryological and Lichenological Society, Inc. (ABLS). President: Roger Rosentreter, contact e-mail: *john.atwood@mobot.org*, web-page: http://www.abls.org/

Journals: Evansia & The Bryologist, web-page: http://www.abls.org/publications.html

**North America, Northwest:** Northwest Lichenologists (NWL). Info: Bruce McCune, contact e-mail: *bruce@salal.us*, web-page: http://home.comcast.net/~nwlichens/nwl.htm

Newsletter: Northwest Lichenologists Newsletter, web-page: http://home.comcast.net/~nwlichens/newsletter.htm

**North America, California**: The California Lichen Society (CALS). President: Bill Hill, web-page: http://californialichens.org/

Bulletin: *Bulletin of the California Lichen Society*, web-page: http://californialichens.org/? page\_id=15

**North America, East:** Eastern Lichen Network. Info: Marian Glenn, e-mail: *glenn-mar@shu.edu*, web-page: http://www.nybg.org/bsci/lichens/eln/

**Poland:** Lichenological Section of the Polish Botanical Society (Polskie Towarzystwo Botaniczne). President: dr. hab. Urszula Bielczyk, e-mail: *bielczyk@ap.krakow.pl*, web-page: http://www.porosty.varts.pl/

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Journal: *Bulletin Slovenskej botanickej spoločnosti*, web-page: http://sbs.sav.sk/SBS1/con-tent.html

**South America:** Grupo Latino Americano de Liquenólogos (GLAL). Info: Susana Calvelo, e-mail: *scalvelo@crub.uncoma.edu.ar* 

Journal: GLALIA, web-page http://nhm2.uio.no/botanisk/lav/RLL/GLALIA/

**Spain:** Sociedad Española de Liquenologia (SEL). President: Arsenio Terrón, secretary: Isabele Martínez, e-mail: *isabel.martinez@urjc.es*, web-page: http://www.ucm.es/info/ seliquen/

Journal: Clementeana, web-page: http://www.ucm.es/info/seliquen/cl.htm

**Sweden:** Svensk Lichenologisk Förening (SLF). President: Martin Westberg, e-mail: *martin.westberg@nrm.se*, web-page: http://www.sbf.c.se/slf/

Bulletin: *Lavbulletin*, web-page: http://www.sbf.c.se/slf/Bulletinen.html; see also *Svensk Botanisk Tidskrift*, web-page: http://www.sbf.c.se/index.php?id=122

**Switzerland:** Association Suisse de Bryologie et Lichénologie (BRYOLICH). President: Christoph Scheidegger, e-mail: *praesidium@bryolich.ch*, web-page: http://www.bryolich.ch/ index\_fr.html

Journal: Meylania, web-page http://www.bryolich.ch/meylania/meylania\_fr.html

**Turkey:** Lichenological Researches Society (LİKEN ARAŞTIRMALARI DERNEĞİ (LİKAD), Başkan: Info: Ayşen Türk, e-mail: *aturk@anadolu.edu.tr*, web-page: http:// www.turkliken.org/

Journal: *Liken Araştırmaları Derneği Bülteni*, web-page: http://www.turkliken.org/ haber\_detay.asp?haber\_id=28

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#### The cover-page illustration

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