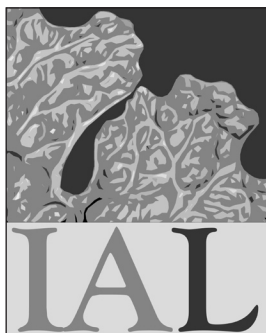


# INTERNATIONAL LICHENOLOGICAL NEWSLETTER

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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 2005-2008) to either Treasurers.

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

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

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

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## ASSOCIATION NEWS

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### *Message from the President*

Most lichenologists I have met are passionate about their subject. Indeed, there is much to get excited about in current lichenology. Molecular biology is transforming lichen phylogenetics and population genetics while whole genome sequences for lichen symbionts, which we hope might imminently become available, promise to revolutionize our understanding of the symbiosis. However, lichenology also faces big challenges. Passion and commitment towards one group of organisms is unfashionable in modern process-driven biology. This together with the small economic leverage of the topic has meant that for many of us, finding full-time employment or winning research funding as lichenologists has proved particularly difficult. So inevitably lichenology is a niche activity and our community relatively small. To make progress as lichen researchers we need to be innovative and imaginative in planning our work. Networking between lichenologists is important and surely this is promoted by the many strong national lichen societies and, of course, the IAL.

The IAL is the over-arching body that provides us with an international newsletter, organizes quadrennial international congresses (and is increasingly providing funding for students to attend these), makes awards recognizing international excellence in our field and creates a sense of critical mass for our members. For me personally, the IAL congresses are the highlight of the meetings calendar. Being a small community, lichenologists are a friendly bunch nurturing relatively few rivalries. Our most recent congress in California in August 2008 was an extremely enjoyable and scientifically stimulating event; we are indebted to Tom Nash and the ABLs team for their excellent organization of this event. This was the first time that an IAL congress had been held outside of Europe, previous congress venues having been Münster, Lund, Salzburg, Barcelona and Tartu. The venue for IAL7 will be Bangkok and the congress will take place during the austral summer, the exact timing has still yet to be decided. This will be the first IAL congress in the tropics and will provide an opportunity to showcase the burgeoning activity in Asian lichenology and to promote engagement between researchers from East and West.

It was towards the end of the California meeting that I found myself with the tremendous honour of being elected as IAL President. The list of past presidents is one of towering figures in the subject and I feel humble to think that I might be considered suitable for this position. Our immediate past President, Ernie Brodo, is an outstanding lichenologist and one of the subject's great ambassadors. He has steered the Association for the past four years with wisdom and statesmanship and I hope that I will not fall too far short of the standard he has set. With the new President comes a largely new IAL Council. Thorsten Lumbsch, Jurga Motiejūnaitė and Christian Printzen are Vice President, Secretary and Treasurer, respectively, and Imke Schmitt is Assistant Treasurer. Peter Scholz was re-elected as Newsletter Editor. Members at Large are Andreas Beck (our Webmaster), Kansri Boonpragob

(Chair of the Organizing Committee for IAL7), Maria Herrera-Campos and Ana Crespo. On behalf of all IAL members I would like to thank the retiring Council for their hard work, stewardship and generosity in giving of their time during the past 4 years.

IMC9 will be held in Edinburgh in August 2010. I hope very much that this event will prove attractive to lichenologists and that I will see many of you there. And of course I also hope to see you in Bangkok in 2012. Until then, I would like to thank you for your support and wish you success in your research.

Peter Crittenden

***6th Meeting of the International Association of Lichenology  
Asilomar, California, USA, 13-19 July 2008***

The IAL held its sixth symposium entitled *Biology of Lichens and Bryophytes* in Asilomar, California in mid-July. Fortunately, this year the meeting coincided with the annual meeting of the ABLs which facilitated the organization and added to the success of the event. Over 250 participants from more than 40 countries attended, matching the turnout of earlier meetings in Barcelona 2000 and Tartu 2004, even though, this year, European lichenologists had to bear the cost and fatigue of transoceanic travel. The warm welcome from ABSL, the Northwest Lichenologists and the Californian Lichen Society colleagues, however, eased the effects of jet-lag by greeting us with delicate strands of *Ramalina menziesii*, T-shirts and cloth bags decorated with paint made from *Niebla homalea*. Those of us who live outside the USA should have remembered the descriptive name of this genus, native to the coast of California, when we packed our bathing suits instead of our rain gear and Polar fleece.

Not surprisingly, the “fog” became a major feature of the scenic site of the Asilomar State Beach and Conference Grounds. The environment certainly gave the lichens a chance to hydrate while the conference lichenologists had a chance to enjoy a relaxed pace, conversation and peaceful walks. However, a few diehards from the Mediterranean, unable to resist the image of Monterey beaches and cooling dips in the ocean on hot summer days, trooped across the wild dunes in a chilling wind in search of the beach, stopping only briefly to read the signs warning interlopers to be on the watch for pumas.

Back at the centre, the symposium’s packed programme of activities would not have allowed us too much beach time even if the days had been sunny and the surf calm. During the five and a half days of business, over 100 presentations were given and some 150 posters were exhibited on lichenology in addition to five days of open discussions and a workshop. After many hours of work, a slight change in the muted light of low cloud cover, reminded participants that the work day had ended, although there were times when activity continued after supper as late as 10-11 pm.

The presentations and posters were distributed among 19 symposia, reminding us of the extraordinary spectrum of scientific fields associated with lichenology. Experts shared information on advanced research techniques and their most ambitious goals in the fields of taxonomy, biogeography, flora, phylogeny, structure, symbiosis biology, bioindication, biochemistry and physiology. In addition, there were three memorable general lectures that stimulated and enriched the audience: “The private life of lichen-forming ascomycetes” by Rosmary Honegger, “A symbiotic approach to the study of lichens” by François Lutzoni, and “The world of lichens as revealed by ecophysiology” by Allan Green.

The conference site deserves a special mention. The buildings created by the architect Julia Morgan blend wood, stone and iron to create a very attractive and warm setting. The houses are scattered throughout great fossil dunes wedged between groves of Monterey pines and California cypress. It was marvellous to contemplate these trees in their natural habitat, particularly for those of us who have only seen them in large plantations or gardens. At sundown, the raccoons made their timely appearance on the porch of our building and the deer strolled peacefully among the cabins. No doubt they preferred our company to that of the beach pumas.

Generous coffee breaks helped fight fatigue during hours of work as did the excellent food served in the Dining Hall. The British Lichenological Society offered a memorable reception to celebrate its 50th anniversary. There also was an IAL dinner that was perfectly organized and provided a magnificent occasion to celebrate the bestowment of the Acharius Award to Rosemarie Honegger, Hannes Hertel and David Galloway, who received a long ovation, and the Mason Hale Award to Dr. Damian Ertz. The Silvia Sharnoff Education Award went to Adriano Spielmann from Brazil. Tom Nash, Corinna Griess and the rest of the organizing committee were also applauded for their magnificent job in orchestrating the event.

Leopoldo Sancho, Madrid

### *New Acharius medallists*

#### **David Galloway**

David Galloway is a real New Zealander born in the little town of Invercargill at the southernmost coast of the South Island in 1942. The wild and magnificent Lord of the Ring scenery from the South Island must have attracted the young David's interest for nature and mountains, visions that came to form his mature life. He studied at the university of Otago in the beautiful little town of Dunedin, where he got a Ph. D. in Biochemistry. Circumstance in the encounter with local botanists, however, made the young Ph. D. to turn over to botany and from 1972 until 1982 David was member of the staff in the Botany Division, Department of Scientific and Industrial Research (DSIR), at Lincoln, New Zealand. It was during this period of his academic career that David came in contact with scientist abroad allowing him also to spend time over seas in the Natural History Museum in London. This



connection, combined with his wife Patricia's international career as an operatic singer, made an opportunity for David to find a position in London. From 1982 to 1987 he was assigned a Senior Research Fellow in the Department of Botany at the Natural History Museum, and from 1987 to 1994 he advanced to Head of the Lichen Division. During 22 years at the Natural History Museum David made a marvellous scientific career publishing a large quantity of publications of mainly systematics and biogeography of lichens. His life's deeds until present was recently presented in volume 95 of *Bibliotheca Lichenologica* where a publication list comprised 319 papers of which several are very comprehensive, i.e. the first edition of *Flora of New Zealand, Lichens* (1985), *Tropical Lichens: their Systematics, Conservation, and Ecology* (1991, symposium volume), and *New Zealand Lichens, checklist, Key and Glossary* (1997, with W. M. Malcolm). During this super active time of his life between 1987 and 1992 David was also President of the International Association for Lichenology. In 1994 David returned to his beloved New Zealand where he first settled in working as a Consultant lichenologist at Roxburgh. Later he became associated as a research-worker at Landcare Research in Dunedin. The medal has always two sides and all the hard work has also led to some health problems for David who, however, has never surrendered a doctor's order completely and recently we could all see the result of his hard labour in the publication of the second revised edition of the *Flora of New Zealand Lichens*. 2<sup>nd</sup> edition. Lichen-forming and lichenicolous fungi. Manaaki Whenua Press, Lincoln (2008). It is an impressive 2261 pp beautiful work of two volumes, comprising 1707 taxa and 354 genera of the lichenized fungi of New Zealand. Only the carefully collected bibliography is an impressive documentation of 181 pp. We congratulate David Galloway for the Acharius award, a very worthy carrier of a prize he was once one of the initiators to award persons for life long and outstanding scientific contributions in lichenology. David John Galloway now belongs in this small assembly of scientists.

Ingvar Kärnefelt, Lund

### Hannes Hertel

The Acharius medal is awarded for "outstanding contributions to lichenology" and the "life work of distinguished lichenologists". Hannes Hertel's contributions to lichenology, his life work as a researcher and teacher and his services to the lichenological community certainly merit such a distinction. And I am deeply satisfied and grateful for this opportunity to honour him with a few words tonight.

Hannes Hertel was born in Munich on 3 February 1939. He was a student of Josef Poelt and published his doctoral thesis on calcicolous species of *Lecidea* in 1967. In 1972 he became a professor at the University of Berlin and in 1973 a curator at the State Herbarium in Munich, a position that he held until his retirement in 2004. These bare facts about his life tell you little about Hannes' character: he is a meticulous lichen taxonomist, a thoughtful and sympathetic teacher, and an unusually honest and modest person. I mention this because I think that these characteristics are inseparably connected with his contributions to lichenology.

Hannes became my Ph.D. supervisor in 1990. Already at our second meeting I was able to obtain an insight into his remarkable character. At the time, we met in his office in Munich to discuss possible subjects for my Ph.D. thesis. He suggested that I should start work on the corticolous lecideoid lichens, and when I was about to leave his office he looked at me and said: "You know that this is going to be a rough journey." By this he meant not the *Lecideas* but my plan to become a lichen taxonomist and my future job prospects. In my eyes this plain honesty together with an unusual degree of modesty describe his character best. An aura of understatement surrounds all his accomplishments and services to the scientific community.

If you search the Citation Index for Hannes you will not find an overwhelmingly long list. His publications are mostly in what is nowadays often called "non-impact" journals. But that tells you little about their impact. It is true that his efforts were mostly directed at a single form-genus, *Lecidea*, but what an effort this was! When Hannes started working on it, *Lecidea* consisted of more than 1000 accepted and 4000 published names, which is roughly 5 % of all described lichen species. It is mostly due to his efforts and the efforts of students he supervised that a large part of these species are identifiable and have found their places in the fungal system. One of his most influential papers, his treatment of the subantarctic lecideoid lichens, appeared in 1984, in the Poelt Festschrift, edited by himself and Franz Oberwinkler. A certain modesty is also manifest in this Festschrift, which is not even indexed, and comprises less than ten papers, but is probably one of the most frequently cited lichenological books.

Hannes' achievements as a scientific teacher are also much bigger than they seem at first glance. Over the years, Hannes had only seven Ph.D. students. But of these seven, four pursued academic careers and are active lichenologists or mycologists today. A success rate of nearly 60 %. And even if their authors did not become scientists, some of the dissertations that Hannes supervised have turned into taxonomic standard works that are still used and cited today. To me, Hannes was an inspiring teacher. His office door was seldom closed, the answers to my questions were usually prompt and thoughtful, and they were always helpful. I am sure that many other lichenologists have had the same experience.

The Botanische Staatssammlung in Munich contains one of the largest lichen collections worldwide. The most important part of it is the Arnold-collection (about 100,000 specimens) with duplicate material from nearly all contemporary lichenologists. It was one of Hannes' major achievements to make this treasure chest accessible for lichenologists. His index of collectors, index of exsiccatae, and his index of Arnold's collecting localities are extremely helpful in this respect. But Hannes was always willing to help beyond that. He would, for example, decipher Arnold's incredibly bad handwriting and type up new labels before sending the collections to foreign colleagues who would have been unable to read them. I often found him in the herbarium digging into a question that someone else had asked him. It's true, this is what a curator is expected to do, but he did all this while he also served as director of the State Herbarium. For seven years, from 1985 to

1992, he had all the administrative work that comes with the position without being formally acknowledged for it, because he was only the provisional director. And did he complain? Yes he did, but not about the workload, only about the overeager bureaucrats that he had to deal with. And his complaints usually took the form of hilarious stories that ended in laughter.

Hannes is always inclined to think the best of the people around him and I hope that he believes us that the IAL means no harm when, in spite of his modesty, it points the spotlight on him tonight and honours him with the Acharius medal.

Christian Printzen, Frankfurt/M.

### **Rosmarie Honegger**

The start of Rosmarie Honegger's academic career is reminiscent of a fairy tale. She grew up in the 'Emmental', a rural region of Switzerland where higher education for girls was not a matter of course in those days. Therefore Rosmarie went to a teacher training school although she would have liked to study biology. Already fascinated by lichens, in 1967 two major events played a crucial role in her future. Upon the advice of one of her teachers she submitted her work dealing with the lichens in her village to the Swiss science competition for young people called 'Schweizer Jugend forscht' and won the first prize. Hence she had the possibility to present her work at a similar international science fair in San Francisco - with equal success. As a consequence of this, a professor at the University of Basle became aware of the young woman with great talent and encouraged her to study biology. To get her started, he found an anonymous sponsor to provide financial support.

From 1967 to 1976 she studied biology at the University of Basle with a special focus on botany. In 1976 she obtained her PhD for an investigation of the development and the function of asci of the *Lecanora*-type using microscopical techniques. A postdoctorate in the laboratory of Professor Hohl at the Institute of Plant Biology at the University of Zurich followed, becoming his assistant in 1977, and senior assistant one year later. A research visit led her to the laboratory of Professor Salomon Bartnicke-Garcia in the Department of Plant Pathology at the University of California in Riverside. In 1988 she became professor at the University of Zurich, where she continues to work in the Institute of Plant Biology of the University of Zurich.

Glancing at Rosmarie's publication list one is overwhelmed by the diversity of research fields she has contributed to, namely anatomical, morphological, taxonomical, cytological, ecological, symbiotic, genetical and phylogenetical studies. Equally great is the number of different methods and techniques she has applied to tackle all these diverse questions. What I find most remarkable is her holistic approach to her research activities. High attention was always given to both the mycobiont and the photobiont partners of the lichen symbiosis, and needless to say their interactions were of particular interest to her.



By exploring lichens from different points of view she has expanded our focus, opening up new perspectives and increasing our knowledge of lichens considerably. It is a great pleasure for me to announce that Rosmarie Honegger is honoured with the Acharius medal today for her long and outstanding scientific contribution to lichenology - congratulations Rosmarie!

Silvia Stofer, Birmensdorf

### ***Mason Hale Award***

Damien Ertz (National Botanical Garden of Belgium) obtained the Mason Hale Award for his doctoral thesis during the IAL6 meeting in California in 2008. He successfully defended his thesis, supervised by Paul Diederich and Emmanuël Sérusiaux, on 26 March 2007 at the University of Liège in Belgium. The title of his thesis was *Morphological, molecular and ecogeographical studies in the family Roccellaceae, with emphasis on Opegrapha and Plectocarpon (lichenized and lichenicolous species)*. The thesis includes several studies on the taxonomy of Roccellaceae and on the molecular phylogeny of the Arthoniales: (1) Revision of the corticolous *Opegrapha* species from the Paleotropics (in press); (2) Revision of the genus *Opegrapha* in the Sonoran Region (published in the third volume of the lichen Flora of the Greater Sonoran Desert Region); (3) A world monograph of the genus *Plectocarpon* (published in *Bibliotheca Lichenologica* 91: 1-155); (4) A three-gene phylogeny of the Arthoniales, with emphasis on the genus *Opegrapha* (published in *Mycological Research* 113: 141-152); (5) Other papers on the taxonomy of Roccellaceae.

From 2002, Damien collected lichens in Europe, several African countries (Bénin, Gabon, Rwanda, Zambia), La Réunion, Madagascar, Macaronesia, the Galapagos Islands and the United States, focusing on Arthoniales. During these collecting trips, Damien was able to isolate and culture many species and genera of Arthoniales, allowing subsequent DNA extraction and sequencing. This was especially important, as direct DNA extraction of crustose Arthoniales frequently gives wrong sequences, either resulting from contaminants or from other species of Arthoniales growing on the same substratum. Four months of training in the lab of François Lutzoni in 2003 were a key step to learning the techniques for the molecular project. A three-gene analysis resulted in a phylogenetic tree with several highly supported clades. The results proved that *Opegrapha* and *Enterographa* are polyphyletic, and that the classical taxonomy based on morphological characters does not correctly reflect phylogenetic relationships.

Damien obtained a permanent position as a lichenologist at the National Botanical Garden of Belgium in 2007 to continue his projects on the Arthoniales.

Paul Diederich, Luxembourg

### ***Sylvia Duran Sharnoff Education Award for Lichenology***

The International Association for Lichenology (IAL) first introduced and presented the Sylvia Sharnoff Education Award at the 5th International Congress of Lichenology held in Tartu (Estonia) in August 2004. The Award is dedicated to the memory of Sylvia Duran Sharnoff, a remarkable lichen photographer, who conceived of the idea of a colour-illustrated, popularized but scientifically accurate treatment of the lichens of North America and, with her husband, Stephen Sharnoff, took thousands of superb lichen photographs all over the continent. Over 900 of them were used in the book. Sylvia was, of course, a dear personal friend as well as a collaborator, and I was touched and delighted to see her honoured in this way.

As originally conceived and proposed by Pier Luigi Nimis and the previous IAL Council, the award was given to the best web page devoted to lichens, prepared by a class or a school at pre-university level. The present Council decided to increase the scope of the award to include any educational website designed to increase awareness and understanding of lichens. This is particularly appropriate for an award that is dedicated to Sylvia Sharnoff since she always adopted the broadest and most inclusive view of her prospective audience.

This year, here in California, we are especially delighted to be joined here by Steve Sharnoff, who, despite his modesty and desire to remain a background figure, agreed to present the award.

The winner of the Sylvia Sharnoff Award for 2008 is a remarkable Brazilian Ph.D. student, Adriano Spielmann. Adriano has assembled a truly amazing website for the benefit of students in Brazil and anyone else able to handle Portuguese. The webpage provides a 19-page introduction to lichens illustrated by marvelous colour photographs of mainly Brazilian lichens. The uses and importance of lichens are covered, and there are all sorts of well-labeled graphics as well, all organized and presented in a way that will help Brazilian students get a start on appreciating and naming their diverse lichen flora.

Irwin Brodo, Ottawa

### **The Congress in Asilomar – a time full of surprises**

The Congress in Asilomar was the very first scientific meeting I ever visited. The time before the conference was filled with a lot of work and preparing the poster proved to be the most difficult task I had to manage so far.

For my diploma thesis I'm working with the genetic variability of *Cetraria aculeata* and I visited the Congress in Asilomar to present some results of my work. Of course I hoped to establish ties with some lichenologists and to get useful input for my future work. But when I'm honest, I did not expect many chances to talk to the other scientists. I suspected that it would be the same as in other branches: everyone wants the best for oneself and the scientists are forked into two or more lairs. In my eyes, a newcomer would have a tough start. But as I arrived in Asilomar all prejudices were forgotten. The landscape was really

impressive even for a homeland fixed couch potato like me. Also the people seemed to be very friendly at first glance. It wasn't difficult to get into conversation with total strangers and at last after two days the English language was more familiar to me. I met so many people in these 7 days and everyone seemed to be interested in my work or my future plans. Also I got more and more interested in the other scientists' work. When scientists talk about their work it is much more interesting than reading the same stuff in a book or papers. In that week I learned so many interesting things and got a completely new view on lichens. The talks enhanced my horizon of knowledge, not only in population genetics (the field I'm working in) but also in systematics and physiology. It was amazing to see in which branches you can work as a lichenologist and for what kinds of analyses lichens can be used. Presenting my poster was the horrible part I experienced during the congress. Talking in front of people has never been a strength of mine. That's why I was all the more surprised that no one laughed or rolled their eyes, but instead of the critical cross-examination I had expected I had many interesting discussions about my work which helped me to recognize some more aspects I had to think about. Furthermore people offered to collect lichen material for my work. I never expected that much helpfulness from other scientists before I went to Asilomar. Altogether I think that the congress was a great achievement to me. My expectations were more than fulfilled and I learned that lichenologists are a very special group of scientists. The atmosphere on that congress was so familiar and I think in no other field of biology it is like that. On that account I'm looking forward to the next Congress in Thailand in hope to meet old and new friends there.

Stephanie Domaschke, Frankfurt

### **The Pacific Northwest lichen tour, 7-13 July 2008**

On Monday July 7 2008, two groups of lichenologists get together, one in Corvallis (Oregon) and the other in Seattle (Washington), gathered by Bruce McCune and Katie Glew respectively. This is the start of the Pacific Northwest lichen tour 2008, a one-week entertainment enjoyed by 23 lichenologists from 12 countries. This was one of several pre-congress field trips arranged prior to the IAL 6 congress in Asilomar, Monterey (California).

During the first excursion day the Corvallis contingent visited firstly two sites at South Santiam River, riparian forest with adjacent open meadows and an old-growth *Pseudotsuga* forest offering the possibility to collect *Usnea longissima*, a lichen that with its incredible length impressed those who had never collected it before. Secondly a recent lava flow at higher elevation was visited. The Seattle contingent spent the night at Pack Experimental Forest, then visited Mount Rainier National Park. In the evening this group also arrived in Corvallis where we stayed at Oregon State University Conference housing, and also enjoyed happy hour at Bomb's Away.

In the morning of the second day the participants arrange themselves and their luggage into vans (arrangements that will change during the trip, in order to give everyone the possibility to experience the air condition system of each car and to

get to know each other) and we drove south to the North Bank Habitat Management Area, a protected area in which native plant populations are restored by management activities such as weed control, prescribed burning and planting. A picnic area with shadowed tables and benches offered us a nice “spot” to take a rest after some hours of driving, and to collect lichens, for instance the *Dermatocarpon* along the dry banks of Umpqua River or explore the oak savanna and climb the basalt cliffs further away from the river. However, the presence of the poison oak (*Toxicodendron diversilobum*) hiding among the rare vascular plants of the area scared some of the participants, who therefore opt for a refreshing bath in the river instead of collecting lichens in the bushes. Even though the extremely warm day could have kept us in the refreshing water we moved on towards Deer Creek Center close to the Californian border, where we stayed for two nights, providing us the opportunity to spend one whole day in the Siskiyou Mountains. The center is nicely situated surrounded by open farmlands. The big kitchen and the open terrace were well used by us to prepare breakfast and dinner, as we enjoyed making our “own” burritos. Close to the Deer Creek Center a small rill/rivulet offers a suitable habitat for *Darlingtonia californica*, a characteristic fern that became the subject of one of the artistic drawings of Kim McNett and of pictures of many of us in the early daylight.

A winding road through *Picea* and *Calocedrus* forests reached the Black Butte Area, our excursion site in the Siskiyou Mountains. We arrived to a wonderful place with a breathtaking landscape, coloured by the bright yellow thalli of every size of *Letharia*. The lichen grows on the trunks and branches and occasionally covers almost completely dead and living trees. The group splits; some spends the day collecting epiphytes while others take a walk through the serpentine outcrops typical of the area near Polar Bear Gap. The sun is shining, the sky is blue, and the view spreads over 360°, unfortunately also some grey smoke above the mountain ridges can be seen, revealing the many forest fires in California, which seriously damaged many areas in the summer 2008.

After the second night in Deer Creek Center, we left Oregon behind us and entered California on our drive south towards our final goal, Monterey. We did some lichen collecting at Smith River, and experienced the astonishing height of the tallest trees of the world by taking a short walk in the coastal redwood forest in Jedediah Smith State Park. After this the fifth day's schedule was unfortunately just a long drive to Jughandle Creek Farm close to Fort Bragg. The cosy house, located about half a kilometre from the ocean in the Mendocino coast, hosts us for the last two nights of the journey. The climate here is rather different from what we have experienced so far on the tour, cooler and foggy, being influenced by the moist air caused by the Pacific Ocean.

Despite the cold and foggy weather we enjoyed the Ecological Staircase trail through the Jughandle State Reserve, which takes the visitors up from the coast to the Pygmy Forest. Here time, geological forces, and climate have interacted to form a staircase of typical plant communities and associated soils. The Pygmy Forest is located on the two uppermost terraces. The vegetation is characterized by stunted trees, none taller than 3-5 meters, and slow-growing plants due to the highly acidic and nutrient poor soil. Tourists and hikers, as well as lichenologists, can explore this particular environment walking on the boardwalk built to protect the cryptogamic





Pacific NW Lichen Tour participants. Back row, left to right: Walter Lockwood, Anamarija Partl, Frauke Ziemmeck, Pat Wolseley, Bruce McCune, Elisabeth Lay, Anna Jonsson, Fenja Brodo, Arne Thell, Ernie Brodo, Matthias Schultz, Filip Högnabba, Frank Bungartz. Front row, left to right: Otilia Johansson, Francoise Rolley, Christine Keller, Lucia Muggia, Kim McNett, Roger Rosentreter, Sarah Jovan, Ave Suija, Ann DeBolt, Katie Glew.

communities (soil crusts of lichens and mosses), which are important to prevent the erosion of the highly leached soil. *Cladina portentosa* ssp. *pacifica* stands out among the soil cryptogams, whereas *Usnea rubicunda* hangs frequent on branches of *Pinus*, *Cupressus* and several other shrubs. At last but not least, here we have the chance to collect the famous net shaped lichen *Ramalina menziesii*. The fruitful day is rounded off at Jughandle Creek Farm with a generous meal of Italian spaghetti cooked in American style and salads.

A short visit to the Hopland Field Station, where *Ramalina menziesii* dominates on some trees is made on the last excursion day before driving straight to Monterey to take part in the opening reception of IAL 6.

On behalf of all the participants we would like to thank the persons involved in making the Pacific North West Lichen Tour 2008 a memorable experience. The leaders Bruce McCune, Katie Glew and Roger Rosentreter had made a great job in organizing the tour and also spent hours behind the wheels of the vans to take us the many, many miles from Washington and Oregon down to Monterey, California. They got great assistance with driving and many other things by Sarah Jovan and Ann DeBolt. Finally we wish to thank all the other participants for good company during the exciting days in the field in the Pacific Northwest.

Lucia Muggia, Graz & Filip Högnabba, Helsinki



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## NEWS

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### **Legion d'Honneur for Marie-Agnès Letrouit**

On 30 September 2008, Marie-Agnès Letrouit received France's most prestigious award, the Legion d'Honneur, for her work on behalf of the mentally handicapped, more particularly those suffering from schizophrenia, to which she has devoted a major proportion of her time over the past 30 years. She played a key role in founding the French Association for Schizophrenia and became its President. In presenting her with this honour, Madame Roselyne Bachelot-Narquin, Minister of Health, also paid tribute to Marie Agnès's outstanding contribution to lichenology, particularly in France where she was instrumental in establishing the Association Française de Lichénologie in 1976, being its first Vice-President and its second President, and in 1993 she organized the highly successful NATO Advanced Work on *Ascomycete Systematics* held in Paris. Marie-Agnès has an outstanding research record in lichenology, especially anatomy and ontology, extending over more than half a century, her first publication appearing in 1953. She was justifiably rewarded with the Acharius Medal in 2004; this honour was long overdue, for she retired from the Université Pierre et Marie Curie in Paris in 1999. Three of her lichenological colleagues, Juliette Asta, Chantal van Haluwyn and myself, were able to be present at this splendid ceremony, held in the Ministerial suite, together with Monique Avnaim, Marie-Agnès's devoted university assistant, who took the photograph which accompanies this article.

Mark Seaward, Bradford



Left to right: Juliette Asta, Chantal van Haluwyn, Marie-Agnès Letrouit and Mark Seaward.  
Photo: Monique Avnaim.

**Harrie Sipman presented with Festschrift**

On 27 December 2008, Harrie Sipman was presented with a Festschrift entitled “Biodiversity and ecology of lichens – Liber amicorum Harrie Sipman” (Volume 99 of *Bibliotheca Lichenologica*) containing 19 contributions by 50 authors. Although the main emphasis is on tropical lichens, the actual scope is wider ranging. Several new genera and many new species are described, and world keys are provided to several groups.

Harrie was completely taken by surprise by the event, which took place one week before his 64th birthday. The book was presented to him during an informal dinner while he was on holiday in the Netherlands. The dinner was attended by many friends: André and Mariëtte Aptroot, Maarten and Dieuwke Brand, Han van Dobben, Kok van Herk, Arien van Iperen, Klaus Kalb, Emmanuel Sérusiaux, Laurens Sparrius and Luciana Zedda with her family. On the afternoon before and the morning after the dinner, there were lively discussions about specimens, species and phylogeny, particularly while visiting the herbarium of André Aptroot.

Harrie’s achievements in lichenology, especially in the tropics, are paramount, and illustrated further by lists of his publications and the taxa described by him and those named after him, which are enumerated at the end of the book. Among his many services to the worldwide lichenological community are his former co-editorship of the *IAL Newsletter* and his continued analysis of published work (which he has modestly called the “Mattick-index”) for the “Recent literature on lichens” database.

The Festschrift by no means signifies the end of Harrie’s activities as a lichenologist, but is merely as an expression of thanks for his generous help to colleagues. We all hope to see him continuing his good work for many years to come.

André Aptroot, Soest; Mark Seaward, Bradford & Laurens Sparrius, Gouda

***New literature:***

**ALAVA, R. (2008): Index of Collectors whose specimens are part of Edv. Aug. Vainio's Lichen Herbarium (TUR-V).** (Publications from the Herbarium University of Turku 12). – Turku. 123 pages, 1 map. Paperback. ISBN: 978-951-29-3369-3. Price: not indicated.

The most valuable part of the herbarium of the University of Turku is still the collection of Edvard August Vainio which consists mainly of lichens. Reino Alava, a specialist of phanerogams and curator of Vainio's collection, has made considerable efforts to make Vainio's lichen herbarium better known and to provide the users with the necessary background information, including from 1986 onwards several contributions in the *Publications from the Herbarium University of Turku*. Now he has provided us with a most useful list of all collectors whose collections are represented in Vainio's lichen herbarium. The publication starts with a short history of the creation of the Turku herbarium in 1920 and a more detailed the history of Vainio's collections therein. The main part of the paper is an alphabetical list of the collectors which not only contains information on collections but also biographical data if known. The biographical data given are reliable, as far as a quick test could prove, but not always complete (e.g. date and place of birth/death of A.N. Oxner or H.S. Rehm are known, as well as date and place of death of V.P. Savicz and A. Schade). Despite this, for everybody who is working with Vainio's specimens it will be of great help to have this compiled information easily available. Thank you to the author for making this very time consuming effort on behalf of the users of the collections he was caring for.

The Editor

**ANDREEV, M. P., A. A. DOBRYSH, N. S. GOLUBKOVA, D. E. HIMELBRANT, O. A. KATAEVA, YU. V. KOTLOV, I. I. MAKAROVA, A. N. TITOV, T. YU. TOLPYSHEVA, I. N. URBANAVICHENE & G. P. URBANAVICHUS (2008): Opredelitel' Lišajnikov Rossii, Bypusk 10 [Handbook of the lichens of Russia vol. 10; in Russian].** – Sankt Peterburg: Nauka. 516 pages. Hardback. ISBN: 978-5-02-026286. Price: not indicated.

37 years after the publication of the first volume of what was at that time the *Handbook of Lichens of the U.S.S.R.*, the final volume of the series can be announced. During that time the political system has changed as well as the borders of the country. Nevertheless, thanks to the continuing effort of Russian lichenologists, especially those of the Academy of Sciences in St Petersburg (formerly Leningrad), it has been possible to complete the enormous task of writing a lichen flora for an area which comprizes in the beginning of the project c. 1/6 of the earth's surface. This final volume contains 467 species from 54 genera and 21 families, mainly the Physciaceae, Psoraceae and Ramalinaceae, as well as numerous smaller families and genera which have not been treated in previous volumes (e.g. *Lepraria* of the Stereocaulaceae, Vezdaeaceae, all basidiomycetous lichens). The text of all 10

volumes is completely in Russian. All accepted species are keyed out and are fully described. Some are illustrated by photographs or line drawings. The distribution within Russia is described together with notes on the world distribution. Various treatments are from one or two of the authors given in the citation. This final volume is concluded with an index of all genera included in volumes 1-10.

The printing and paper quality as well as the number of published copies have changed considerably over the long time of appearance. The first five volumes published in Soviet times are printed on acid containing paper which have turned yellow over the years, but 1185 to 2200 copies of each were published between 1971 and 1978. Volume 2 of the series is a general introduction on morphology, systematics and geographical distribution by A. N. OKSNER [Oxner] which does not contain any descriptions of taxa. After a long break of more than 20 years, volume 6 appeared under the new title in 1996 on much better paper, but only 310 copies were published; later volumes were issued in numbers which have grown to 665. Finally it is worth mentioning that the keys included in volumes 1 and 3-5 were translated into English during the late 1970s in Canada and were available at that time. Congratulations to all who had been involved in this project over the years for bringing this important lichen flora to a successful conclusion. Nevertheless, it would certainly be appropriate to update the earlier volumes.

The Editor

**BOONPRAGOB, K. & K. BUARUANG (2007): Lichens of Samaesarn Island from the mountain summit to the seashore (In Thai).** – 136 pages. Paperback. ISBN: 978-974-9759-74-5; Price: not indicated.

This little book, written completely in Thai, shows clearly how much knowledge of the lichen flora of a tropical country can be achieved by some active workers within a few decades. The value for users not knowing Thai lays in the descriptions of the 92 species treated which always include one or more instructive colour photographs and in most cases additional line drawings of spores or fruit-body sections. The major part of the species included belongs to the Graphidaceae and Thelotremaaceae, some of which have been rarely illustrated before.

It is also nice to learn that there is obviously now enough interest in natural history within the country to support such a publication. Congratulations to the authors for a book which is most probably the first lichen book in their national language.

The Editor

**BRITTON, A. (without year) [2008]: The Montane Heathland Lichen Guide.** – Aberdeen: The Macaulay Institute. – 50 pages. Spiral binding, without ISBN. Price: 10.99 GBP (P & P included). (Available from the publisher: [www.macaulay.ac.uk/lichen/](http://www.macaulay.ac.uk/lichen/))

This little guidebook covers 27 species (mainly macrolichens) which occur in the montane heathlands of Scotland. It is aimed for the non-lichenologist such as

the hiker but it might also serve the vascular plant specialist who is working with heathland plant communities. It starts with a short general introduction to lichens and the methods of lichen determination. The main part is devoted to descriptions of the species, mostly on one page each. This includes also one or sometimes more instructive high quality photographs, habitat notes, remarks on similar species and the grid map of the British Lichen Society's mapping scheme. There is also a special table on the occurrence of the treated lichens in plant communities according to the National Vegetation Classification. The quality of the texts and photographs will certainly allow one to determine these lichens, but the use of subspecies (e.g. *Thamnolia vermicularis* subsp. *subuliformis*) or the addition of „s. lat.“ to a species name without further explanation in the text is certainly confusing for beginners.

The Editor

**FADEEVA, M. A., N. S. GOLUBKOVA, O. VITIKAINEN & T. AHTI (2007): Konspekt lišajnikov i lichenofil'nykh gribov Respubliki Karelija (Conspectus of the lichens and lichenicolous fungi of the Republic of Karelia) (In Russian).** – Petrozavodsk: Karelian Research Centre, Russian Academy of Science. 194 pages, 1 colour plate. Paperback. ISBN: 978-5-9274-0321-9. Price: not indicated.

The Russian Republic of Karelia stretches from the region of Lake Ladoga and Lake Onega (northeast of St Petersburg) in the south to the White Sea in the north. Bordering Finland to the east, Karelia was in historical times sometimes partly within it. Because of that, valuable older lichen collections from Karelia are also housed in Finland, especially at the University of Helsinki, and records have been published by Finnish authors or specimens distributed in Finnish exsiccati. Therefore the joint effort of Russian and Finnish authors is most appropriate to create a checklist and synopsis of the lichens and lichenicolous fungi of that area. The work is, with the exception of a short English abstract, written in Russian, but it can be easily used by anybody with a little knowledge of the cyrillic alphabeth because all information from non-Russian sources is cited in the original, whereas Russian sources are cited in Russian. For every accepted species, literature is cited for 10 subregions of Karelia named in Latin (e.g. Karelia ladogensis, Karelia borealis) and a map of these regions is added. This map also provides numbers of known species per region, reaching on the one hand 917, and on the other those still underinvestigated with only 9 or 109 known species. The number of accepted specific and infraspecific taxa for the Republic of Karelia is now 1256, of which 16 species are reported here for the first time mainly based on specimens housed in Helsinki; collectors and localities are given for these, but not always the date of collecting. Thanks to the authors for the summarization of the knowledge of the lichen flora of this large part of northeastern Europe.

The Editor



**FÖRDERVEREIN NATIONALPARK EIFEL (2007): Moose und Flechten im Nationalpark Eifel** (Schriftenreihe zum Nationalpark Eifel 2). – Köln: J. P. Bachem Verlag. 144 pages. Paperback. ISBN: 978-3-7616-2153-0. Price: 16.95 Euro.

With the growing interest in biodiversity and conservation with consequent development of our knowledge of protected areas, particularly national parks, cryptogams play a key role. This little introduction is devoted to bryophytes and lichens in the recently established German *Eifel National Park*, an area of 110 km<sup>2</sup> of near the French border. Various small chapters are co-authored by seven people, the lichenological part by A. Aptroot and D. Killmann. It is richly illustrated by colour photographs and might serve as an eye-opener for visitors of the park, but may be useful in other central European areas outside the higher Alps. Although the book is aimed at the amateur with a limited knowledge of these organisms, the texts are sometimes too concentrated on names and descriptions of selected species. For the more advanced user and the specialist, species lists of 275 bryophytes and 282 lichens are tabulated (pp. 116-141). Let us hope that the book can increase public awareness for these inconspicuous survivalists (unscheinbare Überlebenskünstler) as they are called in the German subtitle.

The Editor

**HONEGGER, R. & A. APTROOT (2008): Flechten im Botanischen Garten Zürich.** – Zürich: Vereinigung der Freunde des Botanischen Gartens Zürich. 32 pages, without ISBN. Price: CHF 5.00

Although there are numerous introductions to lichens for the general reader, the authors of this richly illustrated booklet have managed not only to fulfill their main task but also to include interesting local aspects, such as a refreshing little chapter on the use of lichens with a photograph of prefabricated wreaths with lichens sold at a Zurich flower fair to florists for their final creations. Despite the fact that c. 10 % of the lichen flora of Switzerland has been recorded from the botanical garden itself, there are no species lists in the book (cf. *Botanica Helvetica* 116: 135-148, 2006). Nevertheless, this is a highly readable and enjoyable introduction to lichenology suitable for the amateur and high school students ; let us hope for a wide distribution among these.

The Editor

**KOSSOWSKA, M. (2008): Lichens growing on calcareous rocks in the Polish part of the Sudety Mountains** (Acta Botanica Silesiaca Monographiae 3). – Wrocław. 108 pages. Paperback. ISBN: 978-83-921764-7-3. Price: not indicated.

This classical floristic lichen study has been carried out in two calcareous rock areas of the Polish Sudety Mountains. Of the 129 species found by the author, of which 53 are new for the area ; however, 45 species reported in the literature must be regarded

as extinct. All species are listed and their distributions within the studied area are mapped. Various reasons for changes in the lichen flora are discussed. The text is in English, with a Polish summary.

The Editor

**LÜCKING, R. (2008): Foliicolous Lichenized Fungi** (Flora Neotropica Monograph 103). – New York: New York Botanical Garden Press. 867 pages. Hardback. ISBN-10: 0-89327-491-7. Price: US \$ 125.

With the growing number of published monographs in this well established series, the number devoted to lichens have also increased. Eight years after the appearance of the last lichen volume (T. Ahti: Cladoniaceae, No. 78), and now a new lichen monograph is available – and what an issue! In respect of species numbers, it is by far the most extended lichen volume in the series, including more than twice the number of species than all previously published lichen monographs put together. It is also the first volume which is for good reasons defined by an ecological rather than a systematic group. Included are all eufoliicolous and pseudofoliicolous species, but not facultatively or accidentally folicolous ones, the author accepting 616 species (out of some 800 known worldwide) for the studied area. Most of them belong to separate clades within a family or genus, or represent whole systematic groups of their own. Therefore overlaps with strictly systematically defined monographs of the series will be few. It embodies all the characteristics of a classical monograph. As well as including a *Natural Key to Orders and Families* it also contains an *Artificial Keys to Genera*. The arrangement of descriptions is in systematic order starting with Arthoniales and ending with two accepted species in the basidiomycete genus *Dictyonema* (Hygrophoraceae, Agaricales). All species are fully described and all are illustrated by black-and-white photographs and/or line drawings. Distribution maps are added for only a few species, in comparison with previous lichen treatments in the series.

The number of taxonomic novelties arising from this volume is also huge: one new family (Lyrommataceae LÜCKING), four new genera (*Baflavia* LÜCKING, *Brasilicia* LÜCKING, KALB & SÉRUS., *Eugeniella* LÜCKING & SÉRUS. and *Phyllogyalidea* LÜCKING & APTROOT), a new section within *Badimia*, 60 new species, 13 new subspecific taxa and 35 new combinations. The introduction and general section comprises nearly 100 pages ; they include an *Historical Survey* and a chapter on *Biological Relationships*. In the former, the mycologist Rehm is mentioned as Swedish, but is in fact the German ascomycete specialist Heinrich Simon Rehm whose collections, especially his exsiccati, are to be found in many herbaria.

The volume is such an enormous step forward in respect of the number of lichens now monographed for the Neotropics; this and the quality of treatment in descriptions and illustrations were the reason for it winning the *2008 Augustin-Pyramus de Candolle Prize for the Best Monograph* which is surprisingly already printed on the title page (see also Personalia). The author and publisher can be heartily congratulated for their

achievement. Bearing in mind that three quarters of all known foliicolous species in the world are included in the present volume, it is essential for everybody who wishes to determine such lichens in tropical areas. The price of the volume in view of its coverage and quality is very reasonable.

The Editor

**MÜLLER, F. & V. OTTE (2008): Verzeichnis und Rote Liste der Moos- und Flechtengesellschaften Sachsens.** – Dresden: Sächsisches Landesamt für Umwelt und Geologie. 132 pages. Paperback. Without ISBN. Price: 10 Euro (available from [versand@saxoprint.de](mailto:versand@saxoprint.de)).

Red lists of threatened and extinct species are useful and widely accepted instruments in nature conservation in many European countries. The number of published lists has increased remarkably over the last three decades even for smaller areas within a given country and they are increasingly used for practical purposes in nature conservancy. Red lists of plant communities are a more recent development, but greatly depend upon the acceptance of plant community classification. Following the development in vascular plants now in Germany, the number of such lists for cryptogams is also increasing. This publication is the first of its kind for the bryophytes and lichens of the southeastern German state of Saxony. After an introduction on methodology and the definition of the categories used, the main part consists of short lists for all accepted communities followed by extended lists with synonymes and remarks on their distribution and development in the area. The grouping in nine different categories of endangerment is in accordance with general practice for red lists in Germany. Over 70 lichen associations are accepted for the area by V. Otte, the author of the lichen part.

The Editor

**NASH, T. H. (ed.) (2008): Lichen Biology** (Second Edition). – Cambridge: University Press. – 486 pages. Paperback: ISBN 9780521692168, Price: 35.00 GBP, 70 USD; Hardback: ISBN 9780521871624, Price: 70.00 GBP, 140 USD.

Twelve years after the first edition (a successor to the three editions between 1967 and 1983 of *The Biology of Lichens* by Mason Hale), a second edition of the multi-authored volume is available. Size, weight and most importantly content have increased considerably; thus it has become in many respects a new book, with six completely new chapters and all remaining chapters revised, sometimes in collaboration with new authors; the number of collaborators (from 11 countries) has increased from 10 to 21. The new chapters focus on *Sexual Reproduction in Lichen-forming Ascomycetes* (R. Honegger & S. Scherrer), *Stress Physiology and the Symbiosis* (R.P. Beckett, I. Kranner & F.V. Minibayeva), *Physiological Ecology of Carbon Dioxide Exchange* (T.G.A. Green, T.H. Nash & O.L. Lange), *The Carbon Economy of Lichens* (K. Palmqvist, L. Dahlman, A. Jonsson & T.H.

Nash), *Environmental Role of Lichens* (M.R.D. Seaward) and as an appendix *Cultural Methods for Lichens and Lichen Symbionts* (E. Stocker-Wörgötter & A. Hager), demonstrating a much broader coverage of lichen biology. Standard, but essential, chapters, such as those on *Photobionts* (T. Friedl & B. Büdel), *Mycobionts* (R. Honegger), *Biochemistry and Secondary Metabolites* (J.A. Elix & E. Stocker-Wörgötter) and *Lichen Biogeography* (D.J. Galloway) have been integrated.

This is certainly not the place to criticize single chapters or the selection of topics. In general it is hard to find aspects of lichen biology which are not covered in this volume at least in one or more chapters. To look for information on special subjects is rather easy thanks to the extensive indices on taxa and on subjects which greatly increase the usability of the volume. Furthermore, references are given for all chapters at the end of the book in one list of over nearly 100 pages. Unfortunately the names of some people are not listed according their national and international bibliographic rules, such as the well-known French lichenologist Henry des Abbayes who appears under D instead of A or for German and Dutch persons with «von» or «van» who appear under V.

The *Taxon Index* includes all scientific names, excluding those of animals or vascular plants, even if used in overviews, tables or illustrations. The *Subject Index* is also comprehensive but needs to be used carefully because of the hierarchical structure which is not explained. For instance *barbatic acid* is to be found under *secondary metabolites* subcategory *individual metabolites*, or *schizidia* is to be found under *asexual propagules*. Nevertheless searching this index is much less time consuming than searching whole chapters and indeed it greatly increases the value of the volume as a reference work. Undoubtedly this book will be used by many lichenologists as well as other botanists or ecologists for that reason. We are indeed grateful to the editor for his dedication in producing such a useful volume which will remain a standard work for the coming years. Needless to say, it is essential for every reputable botanical library.

The Editor

**NASH, T. H., C. GRIES & F. BUNGARTZ (2007): Lichen Flora of the Greater Sonoran Desert Region.** Volume III (balance of the microlichens, and the lichenicolous fungi). – Tempe (Arizona): Arizona State University. – 567 pages, 56 colour plates. ISBN 0-9716759-1-0, Price: 43 Euro.

The Greater Sonoran region covers over 500,000 km<sup>2</sup> of the southwestern United States and northwestern Mexico. It is now possible to identify the lichens of this region by means of a detailed flora in three large volumes, the third and final volume completing the project. The first volume provides a substantial introduction to lichen terminology used with lichens, includes keys to most groups, and descriptions for almost 600 species — the pyrenolichens and most of the squamulose species and macrolichens. The second volume extends coverage to over 700 lichen species in 111 genera, the remaining genera of macrolichens, and the lichenicolous fungi; 64 full colour photographs are included.

Now the final volume completes the treatment of all remaining genera currently known from the Sonoran Region. In addition, a key for sterile crustose lichens is included, and the key to the cyanolichens has been revised. This latest volume seems more useful in a much wider area than only the Sonoran Desert Region. Keys, including newly described species, are provided for several large genera such as *Acarospora*, *Arthonia*, *Aspicilia*, *Buellia*, *Caloplaca*, *Opegrapha*, *Usnea* and *Verrucaria*. Each genus includes a detailed description of its characteristics, sometimes a commentary on the taxonomy and sometimes indicating the number of species in the genus, after which a key to the species and a detailed description of each species is given. There are also small helpful distribution maps for most species.

An additional 39 genera are covered in the last volume, and the species total for all three volumes is 1971 species, of which more than 25% have been described as new to science since 1990. The preparation of the three volumes has undoubtedly been a hard task, but Tom Nash and his co-workers are congratulated on their extraordinary efforts to bring this project to a most successful conclusion, producing the Flora in only six years as they have promised.

Ayhan Şenkardeşler, Turkey

**SIPMAN, H.J.M., W. HEKKING & J. AGUIRRE-C[EBALLOS] (2008): Checklist of Lichenized and Lichenicolous Fungi from Columbia** (Biblioteca José Jerónimo Triana No. 20). – Bogotá: Instituto de Ciencias Naturales, Facultad de Ciencias, Universidad Nacional de Colombia. – 242 pages. Paperback: ISBN 978-958-719-069-4, Price: not indicated.

Checklists are valuable tools for everybody working with larger groups of organisms, as clearly reflected by the growing number of publications and several attempts on the internet. However, there are still a large number of countries without such basic information. Columbia has waited for nearly 150 years to get a summary of the taxonomic and floristic knowledge of its lichens. Thanks to the combined efforts of the authors, currently 1553 species (1444 lichenized fungi and 122 lichenicolous fungi) are known to occur in the country. All species are listed in alphabetical order and literature sources are given according to departments. Synonyms are included in the main list with notes on their actual status, sometimes with short comments. Further information is given on the location of specimens in public herbaria and on the altitude of occurrence if known.

With the compilation of this list, including checking herbarium vouchers, 122 new species for Columbia have come to light. Nevertheless the authors expect with better knowledge 3000-4000 species for the country. One department (Cordoba) has never been collected from, while others have only been visited by one or two collectors (according to Table 3). Unfortunately there is no map of the 31 departments of the country. Another shortcoming from a bibliographical point of view is the abbreviation of the second family name of Jaime Aguirre Ceballos on the title page.



The value of the present list is increased by a complete bibliography of Columbian lichens and by a list of all known lichen collectors with years of their activities in Colombia and the location of their specimens. The introduction also presents a short *History of Lichenological Exploration* and finally the work concludes with a *Systematic Arrangement of the Genera*.

As a result, this checklist will remain a valuable source of information on the lichen flora of Colombia for many years to come, even if outdated by the discovery of a growing number of species from the area that can be more easily achieved now with the help of the new list. Thanks to authors and publishers for making this information available to the lichen community.

The Editor

**THÜS, H. & M. SCHULTZ (2009): Fungi, 1<sup>st</sup> Part: Lichens.** (Freshwater Flora of Central Europe Vol. 21/1). – Heidelberg: Spektrum Akademischer Verlag. 223 pages, 171 figures. Hardback. ISBN: 978-3-8274-1954-3. Price: 64,95 Euro (D), 66,77 Euro (A).

For the first time lichens are treated in this series which was started nearly 100 years ago by A. Pascher under the German title *Süßwasserflora von Mitteleuropa*. Many volumes, especially on various algae, have appeared and for a number of them their second editions are already outdated. However, the publisher and editors (currently B. Büdel, G. Gärtner, L. Krienitz, H.-R. Preising and M. Schagerl) are trying hard to complete and update the series which is certainly a backbone for limnology in Central Europe.

In the introduction the authors discuss many aspects of those lichens more or less directly related to freshwater sources, which is of course basic for the question – which species should be included? The borderline is drawn by ecology: those species submersed for at least some period during the year are treated in detail, while others which might be found accidentally within the splash water zone on the banks of rivers or streams (e.g. *Lecanora muralis*) are integrated in the keys, but not treated in detail. As a consequence, the number of species fully accepted and described is 117. However, many more taxa are discussed as doubtful, uncertain or as «guests» in the keys. Detailed descriptions of morphology, ecology and distribution are presented for accepted species, frequently supported by notes on similar or uncertain species. Nearly all of them are illustrated by black-and-white habitat photographs within the text, and six colour plates at the end of the book illustrate 21 lichen species and 6 photobionts.

Distributional data are normally provided in more general terms without localities in the text, but more precise records (from no less than 14 different countries) are given in an appendix. No taxonomic novelties are introduced, but the very recently segregated genus *Hydropunctaria* Keller, Gueidan & Thüs (from *Verrucaria*) is used for *H. rheitrophila* and *H. scabra*.

The authors themselves state that the taxonomy of some of the treated species (especially *Thelidium* and *Verrucaria* with 17 species each) is not finally settled, but nevertheless this attempt to summarize the current situation is a very valuable one. It will certainly improve our knowledge of some difficult (and hence often avoided) species, as well as stabilizing their taxonomy within Central Europe. The use of English should enforce the use of this little flora in its complete range.

The Editor

**TRUTNEV, YU. P. et al. (eds) (2008): Krasnaya kniga Rossijskoj Federatsii. Rasteniya i griby** [Red Data Book of the Russian Federation. Plants and fungi] Moscow: KMK Scientific Press. 855 pages, many pictures, maps; hardcover. ISBN: 978-5-87317-476-8. Price not specified.

The Russian Federation *Red Data Book* (also known as the *Red Book*) establishes the documentation of rare and endangered species of animals, plants and fungi within the territory of the Russian Federation and its continental shelf and marine economic zone. The book has been adopted by Russia to enact a common agreement on rare and endangered species protection. The book provides a central information source in organizing studies and monitoring programmes on rare and endangered species and their habitats. It also provides for state legal acts under jurisdiction of the Russian Ministry of Natural Resources and Ecology and other government bodies.

After the collapse of the USSR, the federal Red Book of animals was issued in 1998; and now, at last, the federal Red Book for plants and mushrooms has been issued. It is the official directory on the state of species requiring protection and includes data on distribution, biology, ecology, habitats, abundance and state of populations, limiting factors, accepted and necessary arrangement for protection of 610 species of plants, 24 species of mushrooms and 42 species of lichens. The description of each species is accompanied by a coloured figure and a map of its range within Russia.

The following categories and the respective lichen species are as follows:

Category 1 – endangered (taxa and populations whose abundance has decreased to critical levels, making them prone to extinction in the near future): one species only, namely *Everniastrum cirrhatum* (Fr.) Hale ex Sipman

Category 2 – decreasing abundance (taxa and populations whose abundance is constantly decreasing): seven species, namely *Cetraria steppae* (Savicz) Kärnefelt, *Cladonia graciliformis* Zahlbr., *C. vulcani* Savicz, *Letharia vulpina* (L.) Hue, *Lobaria pulmonaria* (L.) Hoffm., *Stereocaulon dactylophyllum* Flörke and *Usnea florida* (L.) Weber ex F.H. Wigg.

Category 3 – rare (taxa and populations with a low number of individuals inhabiting a limited area or sporadically distributed over an extensive territory): 34 species, namely *Asahinea scholanderi* (Llano) C. Culb. & W. Culb., *Bryocaulon pseudosatoanum* (Asahina) Kärnefelt, *Bryoria fremontii* (Tuck.) Brodo & D. Hawksw., *Cetraria kamczatica* Savicz, *Cetrelia alaskana* (C. Culb. & W. Culb.)

W. Culb. & C. Culb., *Cladonia favillicola* Trass, *Coccocarpia erythroxili* (Spreng.) Swinscow & Krog, *C. palmicola* (Spreng.) Arv. & D.J. Galloway [*C. cronia* (Tuck.) Vain.], *Hypogymnia fragillima* (Hillm.) Rassad., *Icmadophila japonica* (Zahlbr.) Rambold & Hertel [*Glossodium japonicum* Zahlbr.], *Leptogium burnetiae* C.W. Dodge, *L. hildenbrandii* (Garov.) Nyl., *Lobaria amplissima* (Scop.) Forssell, *L. retigera* (Bory) Trevis., *Masonhalea richardsonii* (Hook in Richards.) Kärnefelt, *Menegazzia terebrata* (Hoffm.) A. Massal., *Nephromopsis komarovii* (Elenkin) J.C. Wei [*Cetraria komarovii* Elenkin], *Nephromopsis ornata* (Müll. Arg.) Hue [*Cetraria ornata* Müll. Agr.], *Omphalina hudsoniana* (H.S. Jenn.) H.E. Bigelow. [*Lichenomphalina hudsoniana* (H.S. Jenn.) Redhead, Lutzoni, Moncalvo & Vilgalys], *Oropogon asiaticus* Asahina, *Pannaria lurida* (Mont.) Nyl., *Parmotrema arnoldii* (Du Rietz) Hale, *Punctelia rudecta* (Ach.) Krog, *Pyxine soorediata* (Ach.) Mont. [*P. endochrysoidea* (Nyl.) Degel.], *Rimelia reticulata* (Taylor) Hale & A. Fletcher [*Parmotrema reticulatum* (Taylor) M. Choisy], *Stereocaulon exutum* Nyl., *S. hokkaidense* Asahina & I.M. Lamb, *S. pseudodepreaultii* Asahina, *S. saviczii* Du Rietz, *Sticta limbata* (Sm.) Ach., *Teloschistes flavicans* (Sw.) Norman, *Tornabea scutellifera* (With.) J.R. Laundon [*T. atlantica* (Ach.) Kurok.], *Tuckneraria laureri* (Kremp.) Randlane & A. Thell [*Cetraria laureri* Kremp.] and *Umbilicaria esculenta* (Miyoshi) Minks.

Lev G. Biazrov, Moscow

### ***Lichenology Seminars at the Humboldt Institute***

Introduction to Lichens (Fred C. Olday)

June 28 - July 4

Lichens and Lichen Ecology (David Richardson & Mark Seaward)

July 19 - 25

Crustose Lichens of Coastal Maine (Irwin M. Brodo)

July 26 - August 1

Lecideoid Lichens: Identification and Systematics (Alan M. Fryday)

August 2 - 8

Descriptions of seminars may be found at <http://www.eaglehill.us/programs/nhs/nhs-calendar.shtml>

For more information, please contact the Humboldt Institute, PO Box 9, Steuben, ME 04680-0009. Phone 207-546-2821. Fax 207-546-3042. E-mail - <mailto:office@eaglehill.us>

Online general information may be found at <http://www.eaglehill.us>. 2010 seminars will be posted in mid-December of 2009.

Anne Favolise-Stanton, Humboldt Field Research Institute, Steuben (ME)

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## PERSONALIA

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**Andreas Frisch** (Regensburg University, Germany) has accepted a post doctoral position at the Swedish University of Agricultural Sciences, Uppsala, Sweden. He will conduct research on *Cryptothecia* s.lat. in collaboration with **Göran Thor**. The research project is planned for eighteen month and includes regional revisions as well as work on the phylogeny of the group. We would highly appreciate receiving additional material of *Cryptothecia* and related genera. Any recently collected material for molecular analyses is particularly welcome.

**Maria Samantha Fernández Brime** (Ph.D. student with Prof. **Xavier Llimona**, Barcelona, Spain and **Ester Gaya**, Durham, North Carolina) and **María Prieto Álvaro** (Ph.D. student with Prof. **Isabel Martínez** and **Gregorio Aragón**, Madrid, Spain) visited **François Lutzoni**'s lab at Duke for a period of six months (Samantha) and four months (María) to generate molecular data for their respective thesis and learn analytical methods. During this period they also took a graduate course entitled "Systematic Biology" taught by Francois Lutzoni and **David Swofford**.

### *Address change*

**Andreas Frisch**, Department of Ecology, Swedish University of Agricultural Sciences, P.O. Box 7044, SE-750 07 Uppsala, Sweden. New e-mailaddress: andreas.frisch@ekol.slu.se

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## REPORTS

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**JOHN WALTER THOMSON**

**9 JULY 1913 – 20 FEBRUARY 2009**



John Walter Thomson, age 95, died peacefully at his rural Mount Horeb home in Wisconsin. John, born in Cockenzie, Scotland, was a loving and devoted husband, father and grandfather, a world-renowned botanist and lichenologist, and an inspiring and dedicated teacher and conservationist. What started as a youthful fascination with *Cladonia* lichens led to John's lifelong pursuit of improving our knowledge of Arctic and other lichen species. Educated at Columbia University and the University of Wisconsin-Madison (where he gained his PhD in 1939), as a student and young scientist, he was strongly influenced by Raymond Torrey, Norman Fassett and Aldo Leopold. After teaching first at Superior State Teachers College in 1944, he returned to UW-Madison to join the Department of Botany faculty. For four decades he taught plant taxonomy to several generations of students, and trained several successful lichenologists, including Mason Hale and William Culberson. Referred to as the 'Dean of North American Lichens', his Arctic explorations, research, papers and five books were of paramount importance to lichenology for more than 60 years. His last two volume set on lichens of the Arctic was completed after retiring in 1984 from the UW. He was active in many professional societies, and served as the 24<sup>th</sup> President of the American Bryological and Lichenological Society. A memorial webpage at the ABLS website honouring John can be found at: [mywebspace.wisc.edu/jpbennet/web/abls/jwt.htm](http://mywebspace.wisc.edu/jpbennet/web/abls/jwt.htm).

Jim Bennett, Madison, Wisconsin



**ALEXANDER NIKOLAEVICH TITOV****10 MARCH 1959 – 9 AUGUST 2008**

Dr Alexander Titov, well known to many lichenologist friends all around the world as Sasha Titov, tragically passed away on the 9<sup>th</sup> of August 2008 at the age of 49. Alexander Titov was an expert on calicioid lichens, one of the best Russian lichenologists in the new generation, and an outstanding botanist and field naturalist. His scientific activities were tied to the Komarov Botanical Institute of the Russian Academy of Sciences in St. Petersburg, where he worked from 1981 until his last days.

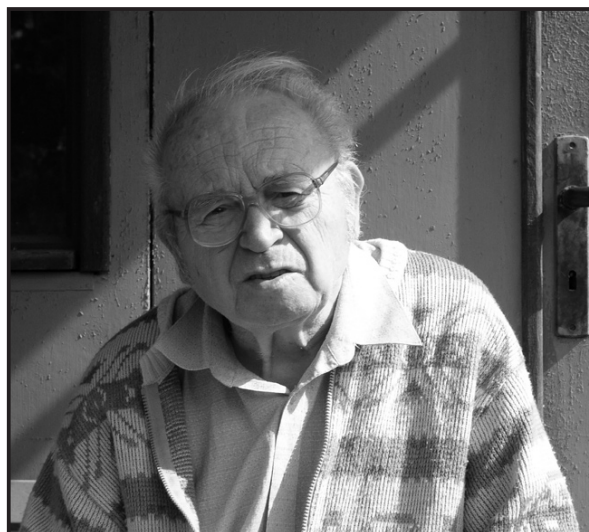
Alexander Titov was born in Leningrad (St. Petersburg). He received a bachelor's degree in mycology from Leningrad (St. Petersburg) State University in 1981, and a doctoral degree in mycology from the Komarov Botanical Institute in 1986. In 2004 he defended his second dissertation 'The family Mycocaliciaceae Schmidt in Holarctic (systematics, ecology, geography, phylogeny)', and was habilitated as Doctor of Science. He was attached to, and later a leading scientist of the Laboratory of Lichenology and Bryology, from 1981 until the fatal incident in August.

Lichenology became his passion when he was still a student at Leningrad University. His scientific interests were concentrated mainly on calicioid lichens, especially of virgin forest regions of Russia and the Holarctic. His first studies of this group were carried out in the Leningrad region as a student. During his field work, Sasha visited many regions of the Soviet Union and other countries from Murmansk and Taimyr in the Arctic to Caucasus and China in the south, and from Karelia and Ukraine in the West to Kamchatka, Sakhalin and the Korean border in the Far East. In the field Sasha had an exceptional ability to find rare and interesting species overlooked by others. Numerous field studies resulted in a magnificent collection of calicioid lichens consisting of many thousands of specimens, which are all located at the Institute's lichen herbarium (LE).

Dr Titov published more than 60 scientific papers and luckily managed to finish his impressive monograph on the mycocalicioid fungi of the Holarctic in 2006. Sasha was true scientist and taxonomist, who liked his work and had big prospects. He was one of the founders of the project on producing a Lichen flora of Russia, and was going to prepare for it a treatment of the pyrenocarpous lichens. Sasha was a very able mentor and generously handed his knowledge over to young scientists.

Sasha Titov was a not only a very knowledgeable, but also very friendly and kind person, and always a good companion. For all this he will warmly remain in our memory.

Scientists of the Laboratory of Lichenology and Bryology,  
Komarov Botanical Institute and of the Department of Botany,  
Saint-Petersburg State University.

**ANTONÍN VĚZDA****25 NOVEMBER 1920 – 10 NOVEMBER 2008**

Antonín Vězda, Toni to his friends, passed away only two weeks before his 88th birthday just after he had recovered after two years of heavy illness and was happily working again on his beloved lichens. He even wanted to buy a new microscope after years working on a 60-year old Meopta. We were so happy he had recovered and were looking forward to coming to his home (which was his laboratory) to wish him good health on his birthday, but sadly this did not happen.

We have lost an outstanding lichenologist. His work spoke for him. He did not like large meetings, but he liked to talk to individuals; hearing him talk about lichens you became infected by his enthusiasm. Visits to him were for me always a shot of energy for work on lichens. I was perhaps the last lichenologist who was with him for an excursion in 2005 and when I visited him in late September 2008 and he was very happy and enthusiastic.

Antonín Vězda was widely known as outstanding taxonomist, in his last decades specializing in foliicolous lichens. Between 1955 and 2008 he published 272 papers on lichens in which he described or made new combination of almost 600 taxa (542 up to 1994, and even between his 80th and 85th years he described 12 new species and 7 new genera!). Besides his taxonomic work, he published with J. Liška (2000) a *Catalogue of Lichens of the Czech Republic*. He also prepared by himself three exsiccate collections, *Lichenes Bohemoslovakiae exsiccati* with 300 numbers, *Lichenes rariores exsiccati* with 500 numbers, and *Lichenes selecti exsiccati* with 2500 numbers (the largest ever exsiccate collection). In total these collections numbered 73 000 of specimens! It is not surprising he was appreciated internationally, being an Honorary Member of the Czech Botanical Society, the Czech Scientific Society for Mycology, the British Lichen Society and the Italian Lichen Society, as well as being awarded the prestigious Acharius Medal in 1992.

His scientific work was also recognized by the numerous taxa described in his honour, including the family Vezdaeaceae Poelt & ex J.C. David & D. Hawksw.,

two genera *Vezdaea* Tsch.-Woess & Poelt and *Zevadia* J.C. David & D. Hawksw. and about 25 new species with epithets beginning “vezda...”, and “antoni...”.

He spent all his life in Brno, in the Czech Republic. At the end of World War II he started as an assistant in the Faculty of Forestry of the Agricultural University, Brno, studying at the same time in the Faculty of Sciences of the Masaryk University in Brno. After graduating in 1947/48 he also studied in the Faculty of Forestry where he graduated in 1951. From 1958 he was forbidden for political reasons to teach in the Faculty because he refused to join the Communist party. He therefore had to work as a forester: for six years he had to get up very early and work hard all day in a forest, returning home on his small cheap motorbike in the evening, often to take care of his two small children since his wife was a children's doctor who could earn more money, but sometimes she had to work at night. Vězda's salary was too low to live on for all of them. Despite these difficult conditions, he did not give up on lichens and collected them and published papers all the time. He tried to obtain a better position, but only succeeded in 1963 when the former Director of the Botanical Institute of Academy of Sciences in Průhonice near Praha, S. Hejný, evaluated his quality as a scientist and offered him the position of researcher, where he successfully defended his doctoral thesis on Gyalectaceae in 1967. The rest of his life he did his scientific work at home. He used every possibility to travel and collect lichens especially for his exsiccata. In the beginning, he was only allowed to travel and collect in eastern communistic countries, but that helped him in understanding the different biotopes. Later he also collected in the Austrian Alps with his very close friend Josef Poelt and in Italy with Pier Luigi Nimis, as well as having the opportunity to work with his other friends Hannes Hertel and Volkmar Wirth. He especially loved the Mediterranean islands and collected in Corsica, Sardinia, Marettimo and Cyprus, as well as the Canary Islands.

With the worldwide distribution of his exsiccata he received many important collections from non-communistic countries, as well as scientific literature which was impossible to obtain in former Czechoslovakia. From the 1970s he started to get a lot of material of foliicolous lichens for identification. He definitely fell in love to them, distributing foliicolous lichens in exsiccates and publishing many taxonomic papers on them from various tropical areas. His dream to see for himself the biotopes of foliicolous lichens was fulfilled with trips to Dominica, New Zealand, Malaysia and the Seychelles.

He was very friendly to all lichenologists and students who visited him at his home, a small flat in Brno, known as the “International Lichenological Institute”, where he always offered coffee and sandwiches, and was happy to talk about lichens, news and people. He always lent to us, younger Czech and Slovak lichenologists, his literature for copying and answered all our questions, always full of encouragement. Lucky were those few lichenologists who met him personally.

He is survived by his wife, son and daughter and four grandchildren. His large collection, surely more than 30 000 specimens, and his library are preserved in the Botanical Institute of the Academy of Science in Průhonice, Praha (Prague).

Jana Kocourková, Praha

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## REVIEWS

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### **The Acharius Medal: a personal reflection**

Recently I received through the post from Allan Green, a small blue box containing the Acharius Medal, and its accompanying citation, that was awarded to me at the recent Congress (IAL 6) at Asilomar on the Monterey Peninsula, California. Since I was not present at the Congress and therefore unable to thank the meeting for this quite unexpected and humbling award, I thought that it might not go amiss to send an acceptance note of thanks to the *International Lichenological Newsletter*, and at the same time use the opportunity, for a personal reminiscence of how the setting up and awarding of the Acharius Medal first came about.

On 3 March 1987, I received a letter from Per Magnus Jørgensen (then Secretary of the IAL) asking whether I would consider standing as a candidate for President of the IAL. In my reply to him I wrote "... Your letter of 27 February has just come and I reply at once as you sound anxious for a rapid reply. My initial reaction to your proposal that I should stand as a candidate for President of the IAL was one of blank incredulity. However, on reading further that you are proposing Lars Arvidsson as Secretary, I realise that we would work together well and that we would both be prepared to put in a lot of time and effort to make the IAL a really viable organisation. In many ways it is no more incredible than 17 years ago when I was asked to become Editor of the *New Zealand Alpine Journal* – if you are prepared to work hard for something that you believe in then comparative lack of qualifications at the start, are likely to be relatively unimportant. What the IAL needs at the moment is a team of hard working people who can relate, and will do something positive over a six year period for the good of lichenology and lichenologists. So I can't really see how I can refuse your request. Indeed, I must say I am flattered to be asked. I'm not sure how many candidates will be voted on for the position, but no matter I am quite happy to stand and if elected will certainly do my very best for the IAL...". Later that year during the XIV Botanical Congress held in Berlin, from 24 July to 1 August, at a Business Meeting of the IAL, I was elected President, *in absentia*.

I was then working at the Natural History Museum in London, and around that time a fairly frequent visitor to the Botany Department was the polar bryologist and botanical historian, Stanley Wilson Greene (1928-1989), a vital, jovial man with a thundering laugh, and a tremendous store of historical knowledge (Gradstein 1989; Longton 1990). Stanley was very active in bryological affairs, having founded the *Bryological Times* in 1980, and was then working closely with Alan Harrington from the Museum on their joint "Conspectus of bryological taxonomic literature". He was elected President of the International Association of Bryologists (IAB) in 1987, having been one of its foundation members in 1969, so it seemed only natural that we should meet for lunch on an occasional basis, to discuss possible areas of contact and mutual support between the IAL and IAB. We used to lunch at a small



French restaurant in the Old Brompton Road in South Kensington. Stanley enjoyed good food, and he would discourse widely on people, places and events and especially about the plants of the antarctic and subantarctic regions of which he was both fond and knowledgeable. During one of our conversations, Stanley spoke to me about the IAB's Hedwig Medal, and the rationale for its award, so it occurred to me (and to him) that the IAL should also think seriously about instituting a similar award for conspicuous, lifelong achievement in lichenology. Turning this over in my mind I decided to write firstly to the IAL's Secretary Lars Arvidsson who was always a good sounding board for new ideas.

On 12 November 1987 I wrote to Lars "... I have thought too that the IAL should institute an **Acharius medal** for meritorious service to lichenology analogous to the Hedwig medal that the Bryologists have. It should be awarded by a special committee formed to bring down a name or names for consideration by the IAL committee. Obviously the President and Vice President and Secretary of the IAL should be members of this committee and we could co-opt several others to help ... if the committee is favourable to the notion of an Acharius medal then I think we ought to think of making the first award at Regensburg. A large international occasion is very suitable for this sort of thing I think. We can then make another award at Tokyo by which time the precedent will have been set. I'll prepare a note on the Acharius award which I shall circulate for discussion amongst the committee ...".

Bob Egan the IAL Secretary responded warmly from Omaha, writing on 10 December 1987, "... **Acharius Medal**. Great idea! I see no reason you we should not "emulate" the bryologists and their procedures. Some recognition on the international level; would be another way [to] get a little "PR" for the IAL and for lichenology in general. Let's do it." The idea thus had traction and the support of the Council, who therefore decided to have a discussion about the matter at the forthcoming IV International Mycological Congress in Regensburg. At a business meeting of the IAL held on 31 August 1990 at Regensburg, the Acharius Medal was an Agenda item, and it was duly proposed "... that a medal to be known as the "Acharius Medal" should be awarded to those who have made an outstanding contribution to lichenology, the first awards to be made at the IAL meeting in Lund. This was approved, and it was agreed that the Council should set up a Committee for this purpose ..." (Seaward 1991).

Where to find a suitable medal at a price the Association could afford was an immediate problem. I asked the Executive Secretary of the Linnean Society of London who supplied their medals, and on being told that it was Garrard & Co of New Bond Street, the Royal jewellers, I decided that on financial grounds we must look elsewhere. It was obviously going to be something of a difficulty! However, on 26 June, 1991 Lars Arvidsson wrote "... I have found a medal of Erik Acharius in Kungl. Myntkabinett in Stockholm. You can see a photo of it in Grumman's Bibliographisch-Biographisches Handbuch der Lichenologie, at the end, where the plates are. The medal is 31 mm diam, rather small. The stamp is owned by Kungl. Vetenskapsakademien, Stockholm. I have asked this academy to investigate



if they can find the stamp and if it is possible to borrow it ...". This was a totally unprecedented discovery, and a very welcome one as it turned out.

On 24 February 1992, I wrote to IAL Council members "...There are a number of important IAL matters to bring before your attention and I apologise for not having written to you before this about them. Since the IAL Symposium in Sweden is now only 6 months away the Council of the IAL needs to give consideration to the following matters ... **2. Acharius Medal**. This was agreed upon at the Regensburg Meeting and the IAL Council was charged with setting up a Committee to make awards at the Lund meeting. I would like to propose that this Committee comprise: President, Vice-President, Secretary, Treasurer (Bob Egan) and Editor (Harrie Sipman) and that we report back to Council members by the end of May at the latest.

My own view is that to get the Medal off to a good start as the premier award in our subject, we need to make a larger rather than a smaller number of awards at this first presentation, since the medal will subsequently only be awarded at 4-5 year intervals and there are at present a respectable number of potential medallists who may not be alive in 4-5 year's time. The Secretary is looking into purchase of a medal already cast by the Royal Swedish Academy of Sciences ...".

In a more detailed letter on 28 February 1992 I wrote again to the IAL Council "... [**Acharius Medal**]...I have had discussions on the medal with Lars Arvidsson who has been in contact both with the Royal Swedish Academy of Sciences (who own the Acharius medal which I circulated a xerox copy of to you in my earlier letter), and also with the Swedish Royal Mint who hold the original die of the medal. The IAL are evidently to be allowed to use this medal (it was struck in 1846 and very few copies seem to have survived) and in conversation with the Mint, Lars was told that medals in silver would be easier to make, and similar in price to bronze. The Mint would also be prepared to engrave the obverse of the medal with the name of the recipient, and I think it would also be appropriate to have above the name "Honoris causa" and below the name, IAL and the year of the award. The cost of each engraved medal will be in the region of £30 - £40 I believe. Lars will let us know as soon as possible exact prices.

The **Acharius Medal** is to be awarded by the Council of the IAL in recognition of "long and distinguished service to lichenology", and I think that such a simple circumscription of the award will be sufficient for Council members to make awards in the future, since both long service and distinguished service, ensure that it will be a rather rare award and one not lightly bestowed. As I said in my earlier letter, I feel that at the Swedish meeting [IAL 2] we should award a larger rather than a smaller number of medals since there are a goodly number of senior lichenologists who at this time would qualify for this award. We should think of awarding up to 12 medals at this first presentation. Thereafter at international congress or symposium meetings (such as at IMC, IBC and our own symposia) smaller numbers will be awarded from time to time. It is now up to the members of the subcommittee to come up with names of recipients...When we have an agreed list of recipients, then I would

like suggestions for people to prepare suitable scientific biographies (including a published bibliography) and citations for each recipient which could be read out at the award ceremony. The texts of these citations plus an appropriate photograph should be published and circulated to the membership in the Newsletter...”.

To this Lars Arvidsson replied (30 March 1992), “...I have made a sketch of the reverse of the medal. We have been in contact with Latin experts and they advise us not to use *Honoris causa* as that is combined with a title usually, viz. *Fil. Dr H.C.* etc. *Pro meritis* is better. The price for 12 silver medals is about 3.300 SEK and for bronze about 2.300 SEK. This includes engraving, tax and a simple box. Postage not included. Please let me know your view on this. I think we should take the silver medal as the prices seem rather low in my opinion. When there is a green light from London I can go ahead and order these things...”

Although the Council at first decided to award 12 medals, by August 1992, thirteen foundation Acharius Medallists were subsequently agreed to and on 3 September 1992 at the General Meeting of the IAL at Hemmeslöv near Båstad, where IAL 2 took place, the following Acharius Medals were presented in age order, with their proposing speakers indicated in square brackets: Gunnar Degelius [Lars Arvidsson]; John Thomson [Ernie Brodo]; Rolf Santesson [Roland Moberg]; Antonin Vězda [Josef Poelt]; Dharani Awasthi [Leif Tibell]; Hildur Krog [Peter James]; Aino Henssen [Martin Jahns]; Josef Poelt [Hannes Hertel]; Otto Lange [Ludger Kappen]; Hans Trass [Ted Ahti]; Bill Culberson [Ted Esslinger read by Tom Nash]; Chicita Culberson [Cliff Smith] and Peter James [Brian Coppins]. The presentation speeches (except that for Hildur Krog) were subsequently reported in the *International Lichenological Newsletter* [Vol. **26** (1): 16-33 (1993)].

Sincere thanks to the IAL and its Council for awarding me the Acharius Medal in 2008. I hope the foregoing narrative will be of interest, and also help put the award in its proper historical perspective.

I am grateful to Allan Fife and Denise O’Neil (Landcare Research, Lincoln) for their assistance with bryological literature, and to Lars Arvidsson for his constructive input.

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David Galloway, Dunedin, New Zealand

## Why is *Ascophyllum nodosum* not a lichen?

David Garbary, Department of Biology, St. Francis Xavier University, Antigonish, Nova Scotia, B2G 2W5, Canada. dgarbary@gmail.com

I gave a presentation recently on my *Ascophyllum* work in which I described the nature of the symbiosis between the fucoid and its fungus, *Mycophycias ascophylli*. Afterwards, someone came up to me and asked “Why isn’t this a lichen?” My response was that as far as I was concerned it was a lichen, but that lichenologists simply didn’t want to think about the association that context. Furthermore, in the mid 1990s I had editors refuse to allow me discuss the association by using the word ‘lichen’ at all in several papers. Kohlmeyer & Kohlmeyer (1972) used the term ‘mycophycobiosis’ for fungal/algal associations involving seaweeds, and several of these forms have formal lichen names (e.g., *Mastodia tessellata*, *Verrucaria tavaresiae*). More recent work in my laboratory (Garbary & MacDonald 1995; Garbary & London 1995; Garbary & Deckert 2001; Deckert and Garbary 2005; Xu et al. 2008) has made the ‘lichen’ designation seem more appropriate for *Ascophyllum* than has previously been considered.

Here are the salient bits of information:

1. This is an obligate relationship. *Ascophyllum* is never found in nature without the same fungal symbiont, and *Mycophycias* is never found in a free-living state.
2. The fungal hyphae are present throughout the host thallus and every cortical cell is surrounded by a ring of hyphae.
3. In culture, *Ascophyllum* grows faster when it has been artificially infected with the fungus than when the fungus is absent.
4. In culture, *Ascophyllum* assumes a different morphology when it is infected with the fungus than when it is grown in the absence of the fungus.
5. Young stages of *Ascophyllum* are protected from desiccation when the fungus is present.
6. Reproduction of the two symbionts is tied together temporally, with ascospores being released from their ascomata at the same time as the host is releasing its gametes. Thus colonization occurs soon after zygote formation.
7. *Ascophyllum* is extremely long-lived (single fronds over 20 years and thalli 100 years) and grows very slowly for a seaweed (apices grow only about 10 cm per year).

Thus, why is this not a lichen? How is this conceptually different from *Verrucaria tavaresiae* that has the crustose brown alga, *Petroderma maculiforme* as its phycobiont (Moe 1997)? Even if phycologists continue to use *Ascophyllum* rather than *Mycophycias* as the name for this association, being able to refer to the association as a lichen (as *Mycophycias ascophylli*) puts the biology of this symbiosis into a whole new light. For me, it explains thallus longevity and developmental

interactions between the two symbionts. The key issue that remains between the above observations and Hawksworth's (1988) definition is the fact that the alga in this case is the exhabitant, and the fungus is the inhabitant. Given the obligate and unitary nature of the association and its biological properties, is this reversal of roles a technicality rather than a fundamental notion that precludes *Ascophyllum nodosum* being recognized as a lichen?

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**The cover-page illustration**

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