

INTERNATIONAL LICHENOLOGICAL NEWSLETTER

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The opinions expressed in the *Newsletter* are not necessarily those held by
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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 listserv 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 pay their membership fee (one payment of 30 EUR or 40 USD for 2021-2026) using PayPal or by bank transfer. All details available at <http://www.lichenology.org/>.

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 10 and November 10 for inclusion in the July and December issues, respectively.

IAL affairs are directed by an Executive Council elected during the last General Meeting. Council members elected at the virtual IAL9 Symposium (Bonito, Brazil, 2021) are listed below, and will serve until 2026.

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ASSOCIATION NEWS

LETTER FROM THE PRESIDENT

Dear members of the IAL,

It is with enthusiasm that I joined the new IAL Council (2021-2026; names and addresses are listed above) last August. This is a very dynamic team, which has met four times already since the conclusion of IAL9. I want to take this opportunity to thank everyone who contributed to the most important event of our association for the 2016-2021 term – IAL9 – especially under such difficult circumstances. IAL9 was a huge success, thanks to the thoughtful and hard work of Marcela Cáceres, Luciana Canêz, Manuela Dal Forno, Natália M. Koch, and Adriano A. Spielmann. In the last five years lichenology has made a major leap forward in scientific advancements, and this was clearly visible during IAL9, including outstanding presentations from many young lichenologists. I want to thank all members of the past IAL Council (2016-2021) under the leadership of Mats Wedin, for carrying our association through these unprecedented and challenging times.

Looking forward, the new Council has an ambitious agenda centered around three main objectives within its overarching mission to promote lichenology: i) Improving diversity, equity and inclusivity in our association, ii) enhancing communications among its members, with the international community of lichenologists, and with other scientific societies, and iii) rebuilding the membership of the IAL. To achieve these goals, in addition to its usual functions, the IAL Council will continue to meet at least once monthly for the near future and has established two new committees. The Inclusion, Diversity, Equity and Accessibility (IDEA) Committee was formed at the end of the IAL9 and is led by Manuela Dal Forno, Natália M. Koch, and Joel A. Mercado-Díaz (Co-Chairs). More recently, the Communications Committee was formed, and consists of Silvana Munzi (Co-Chair), Toby Spribille (Co-Chair), Andreas Beck (IAL website), Frank Bungartz, Roberto De Carolis, Ana Fávoro, Beata Guzow-Krzemińska (ILN), Natália M. Koch (IDEA Committee representative), Theo Llewellyn, Marcela Cáceres (ex officio), Scott LaGreca (ex officio), François Lutzoni (ex officio), and Lucia Muggia (ex officio). These committee members, with their email addresses, are posted on the IAL website and at the end of this newsletter. If you have concerns, suggestions or if you would like to contribute to the goals of these two committees, please do not hesitate to contact any of their respective members. The IAL Council will be working closely with these two committees to better serve all members of the IAL.

More than ever, the IAL needs lichenologists to renew their membership. The IAL symposium is the single most important time point when most members renew their membership or join the IAL for the first time. The virtual nature of IAL9 was not conducive to this process for the 2021-2026 period. Imke Schmitt (Assistant Treasurer) has been reaching out to lichenologists to remind them to renew their membership, or to join the IAL for the first time. If you received ILN54(2) 2021 (this issue) and continue to receive future issues of our newsletter (ILN), this is yet another confirmation that you have paid your dues for the 2021-2026 period, i.e., until IAL10. I want to take this opportunity to thank you for renewing your membership. If you are a new member, Welcome to the IAL! If you know anyone who would like to be a member of the IAL, please encourage them to go to the “Membership” tab on the IAL website (<http://www.lichenology.org/>) where they can pay their dues online. We will greatly improve communications with IAL members. Therefore, it is vital that all lichenologists become members if they want to benefit from these enhanced interactions and activities that will be generated by the IAL.

Thank you for joining me on this five-year long journey to IAL10. One of my goals is to make this journey as enjoyable as the final destination. Please contact me if there is anything I can do to better serve the IAL.

François Lutzoni, Durham, North Carolina

IAL9 GENERAL MEETING (BONITO, AUGUST 5TH, 2021)

AGENDA

- Opening (address from the President)
- Council's report (presented by the Secretary)
- Treasurers' report (presented by the Treasurer)
- Auditor's report (Auditor's Report, presented by the President)
- Changes to the IAL Constitution (presented by the President)
- Next IAL Council, Auditors and Nominating Committee (presented by the President)
- Venue for IAL 10 (presented by Silvana Munzi and Lucia Muggia)
- Any other business

Council officers attending: M. Wedin (President), S. Werth (Vice-President), I. Schmitt (Treasurer), V. Otte (Assistant Treasurer), S. LaGreca (Secretary), B. Guzow-Krzemińska (Editor), C. Ellis (Member-at-large), M. Kukwa (Member-at-large), and M. Eugenia da Silva Cáceres (Member-at-large, as organiser of IAL9).

This was the first general meeting held virtually (online) in the IAL's 52-year history. The meeting was opened by the President, who gave an overview of how the online meeting would proceed. After reviewing the Agenda he explained that questions from the floor would be entertained from the "Chat" section of the online platform. Mats also explained that voting for the venue for IAL10 would be done "in real time", via a "button" available to all participants of the general meeting. After this, he presented a list of lichenologists who had passed away since IAL8. A moment of silence was observed in their honour.

A report detailing the activities of Council (2017-2021) was then presented by the Secretary. The IAL Council held nine minuted Council meetings online 2016-2021, and a number of long discussions (mostly on the subject of holding the IAL9 conference online). Highlights include:

- 2017: Two lichen workshops (Peru, and Graz) were endorsed by the IAL. The 50th anniversary of the International Lichenological Newsletter (ILN) was marked by a switch to online publication.
- 2018: The newly enacted European General Data Protection Regulations (GDPR) required IAL members to give explicit permission to list their name and email address on the IAL website (managed using a Google Form).
- 2019: The 50th anniversary of the IAL was celebrated with an extra-long issue of the ILN featuring photos and memories from our members. 2019 also marked the 200th anniversary of the death of Erik Acharius, the father of lichenology. President Mats Wedin commemorated the occasion with a speech at Acharius' house in Vadstena, Sweden.
- 2020: IAL9 (our first meeting in a South American country) was postponed for one full year due to the pandemic, which forced us to hold this meeting entirely online. However, the concomitant low registration fees allowed us to offer a record number of "travel grants" (in the form of free registrations for persons in-need).

Council's Report was followed by an overview of the IAL's finances, presented by the Treasurer. Imke thanked the members for paying their dues and briefly reviewed how joining or renewing works. She reported the IAL had an income of €14500, and expenditures of €12600, leaving a balance of €1,900. Most of the expenditures were in the form of travel grants for IAL conference attendees. The 1,900 combined with the previous balance (from the previous Council) totaled €15,600, our current balance. She further reported that the IAL currently has 260 members, and this number has not

changed significantly in the past 15 years. She encouraged IAL9 participants who aren't yet members, to join.

Following this, the President presented the report of the Auditor, Ulf Arup. Ulf concluded that the IAL bank account is in good order, and that all expenditures were justified and in line with the activities of the Association.

It was then announced that the proposed IAL Constitution changes were all approved by the membership via electronic ballot. Most of the constitutional changes concerned making the Association's procedures and rules more flexible in case an IAL symposium has to be postponed and/or held online. Other changes included doing away with the Advisory Board, because an Advisory Board has never been put together or utilized in the association's history.

Then, Rebecca Yahr, chair of the Nominating Committee, announced the results of the voting for new Council Officers, who were elected via electronic ballot. François Lutzoni was elected unanimously as the new IAL President. Marcela Eugenia da Silva Cáceres was elected as the new Vice President. Andreas Beck was elected as the new Treasurer (Andreas is also our IAL webmaster). Imke Schmitt was elected as the new Assistant Treasurer. Lucia Muggia was elected as the new Secretary. Beata Guzow-Krzeminska was re-elected unanimously as the International Lichenological Newsletter Editor. Jessica Allen, Cécile Gueidan, and Scott LaGreca were elected as the new Members-at-large. Starri Heiðmarsson was elected as the new IAL Auditor, and Andrei Tsurykau was elected as the new Vice Auditor. Manuela dal Forno, Ave Suija and Troy McMullin were elected as the new IAL Nominating Committee. Afterwards, Mats clarified that the Auditors and the Nominating Committee are newly elected along with the Council Officers, but they are not in any sense members of Council.

Finally, presentations were made by the two candidates for IAL10: Silvana Munzi, representing Lisbon, Portugal; and Lucia Muggia, representing Trieste, Italy. A video presentation was played by each candidate, and afterwards they answered questions. After some technical difficulties, "real time" votes were enabled and counted, and **Trieste was selected as the venue for IAL10**. It was suggested (by multiple members) that IAL10 be held at least partly online, and Lucia and Mats agreed. Additionally, Mats pointed out that because of scheduling conflicts with the International Mycological Congress (and our desire to alternate our symposia every second year after theirs), **IAL10 will take place in 2026**.

There were no other items proposed for "any other business".

Respectfully submitted,

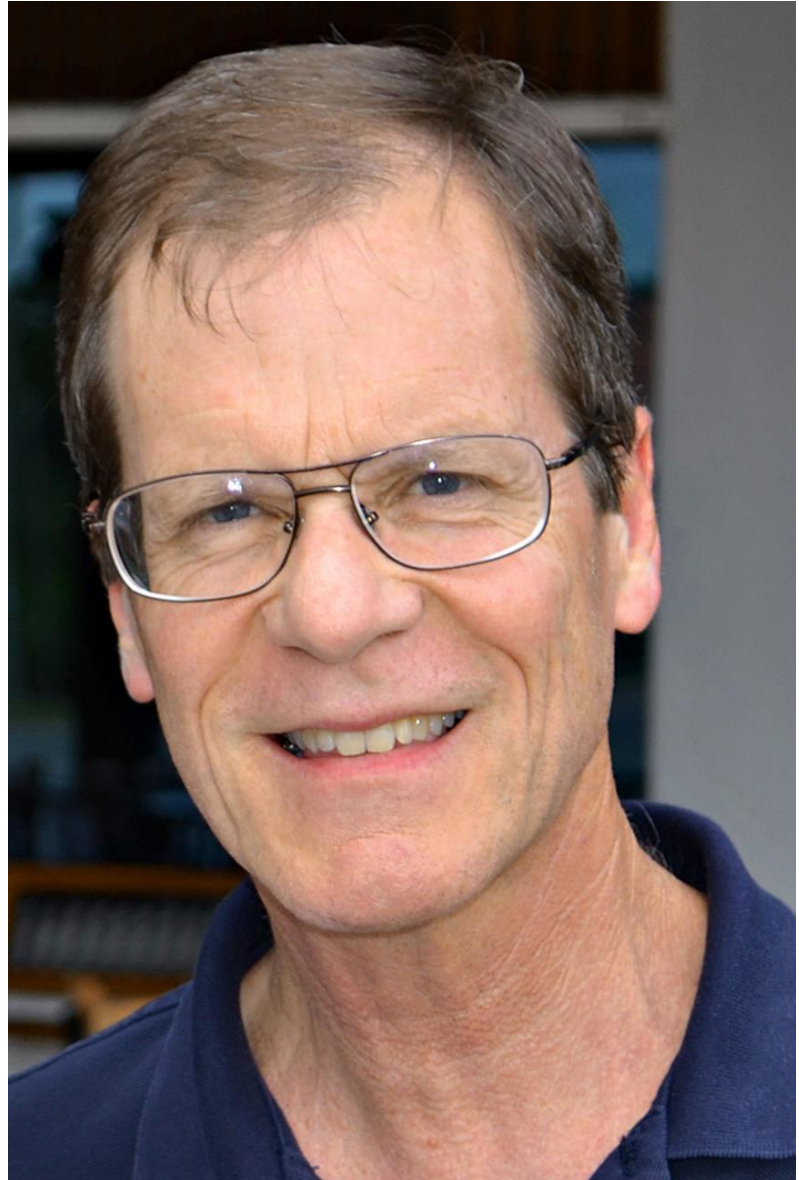
Scott LaGreca, Secretary

NEW ACHARIUS MEDALLISTS

THE ACHARIUS MEDAL JAMES D. LAWREY

The Acharius Medal, awarded by the IAL, honours outstanding lifetime achievements in lichenology. This year's Acharius medal was awarded to James D. "Jim" Lawrey, during the virtual meeting of the 9th International Association for Lichenology Symposium (IAL9) on August 6th, 2021, in Brazil. Jim will also celebrate his 72th birthday on December 15th this year.

Jim's scientific career now spans 48 years, having obtained his master's degree in 1973 from the University of South Dakota, working on floodplain plant ecology. He obtained his MSc at only 24 years old, starting a textbook career any student would dream of. Just four years later, at the age of only 28, he received his doctoral degree from Ohio State University — on plant, lichen and fungal communities in an abandoned coal mine — under the supervision of the late Emmanuel Rudolph. He was immediately (1977) appointed to a full-time position as Assistant Professor at George Mason University in Fairfax, Virginia, advancing to Associate Professor in 1982 and Full Professor in 1993. Only two years after receiving his PhD, in 1979, he published a paper as first author in *Science*, with the late Mason Hale as co-author (Lawrey, J.D., Hale, M.E. 1979. *Lichen growth response to stress induced by automobile exhaust pollution*. *Science* 204: 423–424.). His doctoral thesis resulted in no less than eight swiftly published papers in various international journals, including *Canadian Journal of Botany*, *Environmental Pollution*, and *Mycologia*, among others.



James D. "Jim" Lawrey

Jim has had an extraordinary breadth in his scientific approach, being a trained ecologist encompassing plants, fungi, lichens, and animals. This is well-documented through his numerous publications, including plant and fungal community ecology, lichen biomonitoring, lichen-animal interactions, chemical biology of lichens and lichenicolous fungi, and the evolution of lichens and lichenicolous fungi. He has set standards in the experimental approach to the study of the biology of lichenicolous fungi and their interactions with their host lichens, particularly regarding secondary compounds as defense mechanisms. His contributions (mainly from the 1990s) on this topic remain largely unmatched, with few researchers having worked in this line of research since then.

Beginning with his first studies with Mason Hale on Plummers Island in the 1970s, Jim has been active in broad-scale lichen monitoring programs throughout North America during the past four decades, collaborating closely with the National Park Service. His work has been instrumental in setting up long-term monitoring studies using lichens in North America, a program still unique across the globe. With his successful, late-career NSF project on the evolution of basidiolichens in the *Dictyonema* clade, Jim has revolutionized our understanding of basidiolichen diversity and has put this unique group of lichens firmly on the map. This work is being continued by his latest PhD student, Manuela Dal Forno.



James D. Lawrey with the Director of the lab, Dr. Patrick Gillevet on the right, and the Technical Director, Dr. Masoumeh Sikaroodi on the left.

Apart from his scientific achievements, Jim's service to the academic and the lichenological community is exemplar. He has given countless university courses over more than 40 years to literally thousands of students, on all aspects of biology and lichenology, and was senior lecturer in two OTS tropical lichen courses, held in Costa Rica in 2007 and 2012. He has been a committee member for 27 graduate students, and the main supervisor of six of them. Those students unanimously consider him a supervisor of outstanding quality and dedication. In addition, Jim has served on the boards of many scientific societies, including the Washington Biologists Field Club (WBFC, including as President), the Botanical Society of America (BSA), the Botanical Society of Washington (BSW), the American Bryological and Lichenological Society (ABLS, including as President), the British Lichen Society (BLS, including as Associate Editor of *The Lichenologist*), and the International Association for Lichenology (IAL) for 35 years and counting. His ongoing tenure as Senior Editor of *The Bryologist* since 2012 has significantly raised the international standing of the journal, for which he developed a new, modern layout and raised the impact factor to temporarily well over 2.3.

For more details on Jim's career, including a selection of memorable photographs, see: *Lücking, R., Dal Forno, M., Will-Wolf, S. 2019. James Donald ('Jim') Lawrey: a tribute to a unique career in lichenology. Plant and Fungal Systematics 64: 117–135.*

Robert Lücking, Manuela Dal Forno & Susan Will-Wolf

THE ACHARIUS MEDAL PER MAGNUS JØRGENSEN

Per Magnus Jørgensen developed his interest in plants early in life. He studied at the University of Bergen resulting in a cand. real. degree in botany (1969) under Professor Knut Fægri. Young Per Magnus found he had a growing interest in lichens, but no others in Bergen had worked with lichens since Havaas, around 1900. Fægri stimulated this interest by inviting Rolf Santesson from Uppsala in Sweden to give a lichen course in Bergen. By that time, Per Magnus had met legendary Swedish lichenologist Gunnar Degelius during one of his travels in Norway, and was very inspired. In 1971, Per Magnus moved to Uppsala and became a student of Santesson, where he worked on a monograph on the Pannariaceae of Europe, which he defended as his doctoral thesis in Bergen in 1978.



Per Magnus Jørgensen (Photo: Gerd Jørgensen).

But in the mean time, in 1973 he was recruited as curator of the Botanical Garden in Bergen. He was appointed professor there in 1982.

During his career in Bergen, Per Magnus has gradually revised the Pannariaceae of the world, and in 2014 (with Ekman, Lindblom & Wedin) he published a new generic taxonomy of this large and complex family. He has described numerous taxa, including some genera (*Fuscoderma*, *Fuscopannaria*, *Kroswia*) in the Pannariaceae. Per Magnus still works with Pannariaceae today.

Before leaving the topic of Pannariaceae, it has to be mentioned that Per Magnus helped an Argentinian student called Alfredo Passo with his Pannariaceae specimens, resulting in Alfredo later named a new genus in honor of him: *Joergensenia*.

In 2007, Per Magnus summarized what we in the Nordic countries know about our cyanolichens, a treatment filling most of the pages of volume III of the Nordic Lichen Flora. Here he handled the big genera such as *Lobaria* and *Sticta*, as well as all the small crustose genera, known among lichenologists as the “little black ones”. His interest in the little black ones dates from his early work with the late Aino Henssen, a specialist in the order Lichinales.

Per Magnus also has a life outside the Pannariaceae. The Collemataceae, especially the genus *Leptogium*, has caught his attention over the years. His work with the *L. mallotium* group has been especially helpful to lichenologists. Other families he has studied include Lichinaceae,

Massalongiaceae (which he described), and in the beginning of his career, the Parmeliaceae (especially the genera *Alectoria* and *Bryoria*). He has even described a new lichen genus in the Basidiomycetes, *Acantholichen*.

Per Magnus has published around 300 papers in lichenology. And in these papers, he has described something like 300 lichen species, genera—and even families! During his long career, he has carried out copious amounts of field work. Outside of Europe, he has visited 40 of the American states and at least one province (British Columbia) in Canada. He has also collected lichens in Africa, Central America, South America, Australia, New Zealand and Japan.

His herbarium is at BG, with some duplicates in UPS.

Per Magnus has also been an active member of the British Lichen Society, and in 2008 he became a honorary lifetime member.

Per Magnus became involved in nomenclatural work, and he was a member of the International Nomenclatural Committee of the International Association for Plant Taxonomy (IAPT) for many years. He also served as secretary in the IAL in the years 1981-1987.



Mats Wedin with Per Magnus Jørgensen in Uppsala (Photo: Stefan Ekman).

In his work for the Universitygardens, Per Magnus established the large *Rhododendron* collection, which he is still works on. He also established a big Japanese garden. In addition, he has been the director of the gardens in many years.

His interest in the history of botany has resulted in several papers on Gunnerus, Linnaeus and others. Since 2008, Per Magnus has dedicated much of his enormous energy to the work of Johan Ernst Gunnerus—for example, translating his *Flora Norvegica* from 1770 from Latin to Norwegian. He has also written a book on the history of botany in Norway, and a book on the history of the Museumgarden in Bergen.

Jørgensen's list of papers comprises more than 300 publications, 6 books and hundreds of popular papers about lichens, rhododendrons, and botanical and garden history. For 10 years he served as editor of the journal *Naturen*.

We have been so lucky to have Per Magnus as our colleague, collaborating with him in many ways. For those of you that have not met Per Magnus (I guess the rest of you will never forget him), I have to say that his is a tall man with a loud voice and lots of energy and a big smile. His enthusiasm and interest is so unique!

Today, Per Magnus is a professor emeritus, still very active in lichenology and botany.

Heidi Lie Andersen and Tor Tønberg

AINO HENSSEN AWARD MATTHEW P. NELSEN

For all our young colleagues who attended an IAL meeting for the first time this past summer, I think it would be nice to say a few words about the person that this award is named after. Aino Henssen was one of the first female lichenologists who held a professor position. That was in Marburg in Germany in the 1960s and 70s. From her lab originated not only groundbreaking research on fruiting body ontogeny and systematics, but also a large number of students who have become active and influential lichenologists themselves. In this spirit of passing on lichenological knowledge, and thereby empowering the next generation of lichenologists, the IAL decided to honor a mid-career lichenologist with an award in Aino's name.



Matthew P. Nelsen (Photo: Matthew Nelsen)

This year's awardee impressed the committee (Silke Werth, Bruce McCune, Imke Schmitt) with the amount and quality of his papers, displaying an exceptional breadth of research output. While the awardee's research interests are clearly rooted in the evolutionary biology of the lichen symbiosis, he has the vision and capabilities to venture into broader research areas, such as symbiosis research, and biotic interactions. This has resulted in a large portfolio of papers published in journals ranging from *The Lichenologist* to PNAS. Also truly amazing is the scope and amount of the awardee's outreach activities. These included newspaper articles, panel discussions, bioblitzes, field trips, and museum exhibits; these addressed many people ranging from school groups (of all ages) to the general public. The committee came to the conclusion that the awardee's activities have not only left a footprint on the discipline of lichenology, but have also contributed substantially to the wider dissemination of knowledge about lichens. We proudly announce Matthew Nelsen as the winner of the Henssen Award.

Imke Schmitt

MASON E. HALE AWARD TODD WIDHELM

The Committee for the Mason Hale award often has a difficult task, and this year has been no exception. All theses presented were of extraordinary quality, and it has been really gratifying to see research articles that are breaking new ground in lichenology.

We are very pleased to announce that the Mason Hale Award 2021 is given to Todd Widhelm, for his thesis entitled “Phylogenomic Systematics of Lichenized Fungi at Multiple Taxonomic Levels”. The thesis was completed at the Field Museum (Chicago), supervised by Roberta Mason-Gamer and Thorsten Lumbsch.



Todd Widhelm (Photo: Todd Widhelm)

Todd Widhelm's thesis has greatly enhanced our knowledge of the phylogenetic relationships of lichens, especially in the lobarioid clade of the family Peltigeraceae. The thesis goes into the depth of exciting topics in lichen evolution, including reticulate evolution; factors influencing speciation rates; and biogeographic patterns of species with disjunct distributions. Also, and very importantly, Todd's thesis has been pioneering in applying cutting-edge high-throughput sequencing technologies (in particular RADseq and target enrichment sequencing) to lichen-forming fungi. These are cost-efficient methods developed to sample subsets of genome-scale data, and are suitable for phylogenomic studies at deep or shallow timescales. The application of these technologies in lichens were initially hampered by methodological challenges, but Todd overcame them in his work. Todd's studies are the first ones in lichen-forming fungi that use multi-gene data sets from 1) RADseq in a study of population genetics and biogeography of *Pseudocyphellaria glabra* (Widhelm, T. J., Grewe, F., Huang, J. P., Ramanauskas, K., Mason-Gamer, R., Lumbsch, H. T. 2020. Using RADseq to understand the circum-Antarctic distribution of a lichenized fungus, *Pseudocyphellaria glabra*.

Journal of Biogeography 48. 10.1111/jbi.13983), and 2) target enrichment sequencing in a phylogenomic study of the former family Lobariaceae (Widhelm, T. J., F. Grewe, F., J. P. Huang, J. P., J. Mercado, J., B. Goffinet, B., R. Lücking, R., B. Moncada, B., R. Mason-Gamer, R., H. T. Lumbsch, H. T. 2019. Multiple historical processes obscure phylogenetic relationships in a taxonomically difficult group (Lobariaceae, Ascomycota). Scientific Reports 2019 9(1):8968). We foresee that his thesis will become a reference point, opening great possibilities in the study of the phylogeny and evolution of other groups of lichenized fungi. Along these lines, we are glad to see some interesting new work led by Todd, published very recently (Widhelm, T.J., Grewe, F., Goffinet, B., Wedin, M., Goward, T., Coca, L. F., Distefano, I., Košuthová A., Lumbsch, H. T. 2021. Phylogenomic reconstruction addressing the Peltigeralean backbone (Lecanoromycetes, Ascomycota). Fungal Diversity. <https://doi.org/10.1007/s13225-021-00476-8>)

Todd's thesis represents a breakthrough in lichen systematics, and we look forward to his future research. Both the Committee and the IAL Council convey their warmest congratulations on his well-deserved success!

Ana Millanes (on behalf of the Hale Award Committee), Móstoles (Spain)

DHARANI AWASTHI AWARD SILJO JOSEPH



The 2020 (2021) Dharani Awasthi Award was made to Dr Siljo Joseph.

Dr Joseph completed his PhD in 2017, having studied at Bharathiyar University, and publishing his thesis as a book: “*Taxonomic studies on the lichen genus Opegrapha in India*”. Afterwards, during his first postdoc, Dr Joseph began to revise the genus *Arthonia* in India. So far, he has described 10 new species, two new combinations, and has contributed 30 research papers in peer-reviewed

journals. For his contributions to *Arthoniales* a species of *Synarthonia* has been dedicated to him as “*Synarthonia josephiana* Van den Broeck & Ertz”. Currently, Dr Joseph works as an INSPIRE Faculty, which is a prestigious fellowship awarded by the Department of Science and Technology, New Delhi.

Beyond taxonomy, the committee also considered Dr Joseph’s activities championing lichenology in south Asia. Namely, he has reported a great many new distributional records for India; he serves as an executive council member of the Indian Lichenological Society; he helps maintain the website of the Indian Lichenological Society; and he has developed a YouTube channel that introduces people to the fascination of Indian lichens. His expanding studies also reflect his developing interests in phylogeography and conservation, and Dr Joseph now supervises four PhD students and two post-graduate assistants, generously sharing his expertise while developing his career as a research leader.

This summary of Dr Joseph’s achievements reflects exceptional service to lichenology, as well as his stunning range of activities for an Early Career Researcher—and so, on behalf of the IAL, we were delighted to present Dr Joseph with the Dharani Awasthi Award.

*The Dharani Awasthi Award Committee:
Christopher Ellis, Manuela Dal Forno and Gothamie Weerakoon*

MARGALITH GALUN AWARD FOR BEST STUDENT POSTER AT IAL9: IAN D. MEDEIROS

A committee consisting of Beata Guzow-Krzemińska, Martin Kukwa, Lucia Muggia, Volker Otte and Silke Werth evaluated all student posters with regards to both their scientific content and their clarity of presentation. Each poster was evaluated by three committee members, and a maximum of 10 points could be scored in each category.

The Margalith Galun Award for best student poster was given to Ian D. Medeiros (Duke University) for his poster “Bolivian lecanoroid lichens exhibit photobiont interactions structured by elevation, mycobiont phylogeny, and substrate”. The reasons for the award were (1) the excellent explanation of the research questions as well as the motivations for the study; (2) the outstanding presentation of a complex dataset of mycobiont-photobiont sequence data; and (3) the exciting results that point towards the ecological structuring of lichen algae along an elevation gradient.

Beata Guzow-Krzemińska, Martin Kukwa, Lucia Muggia, Volker Otte and Silke Werth

MARGALITH GALUN AWARD FOR BEST STUDENT’S ORAL PRESENTATION AT IAL9: ANTOINE SIMON

The Margalith Galun Award for best student oral presentation was given to Antoine Simon, University of Liège, Belgium, for his talk entitled “The dual nature of lichens: a transcriptomic approach to understand photomorphism”. The committee selected Antoine based on the following criteria: (1) the presentation addressed a long-standing issue in lichen biology with a clever combination of tools; (2) the topic was well-explained, and the presentation well-structured; and (3) Antoine’s innovative presentation format was engaging both visually and aurally—entertaining his audience while remaining serious about his science.

Mats Wedin

REPORTS



THE 9TH SYMPOSIUM OF THE INTERNATIONAL ASSOCIATION FOR LICHENOLOGY "UNLOCKING THE INNER LICHEN" HELD ONLINE IN BRAZIL 01–06 AUGUST 2021

The 9th International Association for Lichenology (IAL9) symposium was first scheduled to be held in Bonito, Mato Grosso do Sul, Brazil—and it was an important achievement for improving geographic diversity, since the previous meetings were mostly in Europe (aside from one in North America and one in Asia). But unfortunately, when COVID-19 began to conquer the globe at the beginning of 2020, it soon became clear that IAL9 could not happen as planned. First, we thought that postponing the meeting one year would be enough to hold an in-person IAL9 in Brazil, but soon we realized that the only way would be to have an online conference. It was very disappointing to say the least—but on the bright side, this enabled many people to attend it: 375 registered participants from 46 countries—a record in the history of IAL Symposia. If you are curious to know who was present, please visit <https://doity.com.br/ial9/blog/ial9-registrations>.

One of our main goals as organizers was to provide an inclusive, diverse and gender-balanced program, so we invited an equal number of female and male keynote speakers as well as a variety of session moderators from different backgrounds. The six Keynote speakers were:

- (1) André Aptroot: “The four lichen floras of Brazil”;
- (2) Cécile Gueidan: “Using next generation sequencing approaches to build on the importance of lichen collections”;
- (3) Ester Gaya: “Yellow, orange, red alert: How to make sense of processes of diversification and genera delimitation in the Teloschistaceae”;
- (4) Lucia Muggia: “Fungi and algae: from interactions to relationships”;
- (5) Peter Nelson: “Remote sensing of lichens across spatial and spectral scales to visualize traits”;
- and
- (6) Robert Lücking: “Taxonomy in the 21st Century: Trade-off between scientific accuracy and practicability?”

In addition, two Brazilian botanists, Arnildo Pott and Geraldo Alves Damasceno Júnior, gave a joint talk on “Brazilian biomes”.

There were 12 symposia organized by colleagues in a great variety of topics, for a total of 60 talks:

- (1) Eco-evolutionary dynamics of symbiotic interactions;
- (2) Lichens and climate change: a multi-scale challenge;
- (3) Lichen-associated microorganisms;
- (4) Biodiversity of Neotropical lichens;
- (5) New approaches to harness genetic data from herbarium specimens;
- (6) Ecology, evolution and diversity of lichen algae;

- (7) Genomics and bioinformatics;
- (8) Macroevolution of lichens;
- (9) Lichens as invaders of rocks and control strategies;
- (10) New developments in the taxonomy of the *Lecanoraceae*;
- (11) Progress in classical and genomic aspects of lichen secondary chemistry; and
- (12) Paleotropical lichens.

In addition, there were several topic sessions, comprising a total of 72 oral presentations. These included many lightning-talks, which gave the opportunity to many young lichenologists to present their research for the first time at an international event. Furthermore, IAL9 had 141 posters presentations and five fantastic workshops held by great lichenologists (<https://doity.com.br/ial9/blog/workshops>) on the following subjects:

- (1) Manejo de muestras y listas de especies de líquenes en el Consorcio de Herbarios de Líquenes en América Latina (CHLAL). Instructors: Dr. Frank Bungartz (Arizona State University, USA) and Jesús E. Hernández M. (National Herbarium of Venezuela).
- (2) Breaking the stigma: Characters and identification of *Usnea*. Instructor: Dr. Alice Gerlach (Botanical Research Institute of Texas).
- (3) IUCN Lichen Red Listing Workshop. Instructors: Dr. Jessica Allen (Eastern Washington University) and Dr. Rebecca Yahr (Royal Botanic Garden Edinburgh).
- (4) Track global lichen diversity with community science on iNaturalist. Instructors: Ann Evankow (University of Oslo, Norway), Alejandro Huereca Delgado (University of Alberta, Canada) and Dr. Klara Scharnagl (University of California, Berkeley).
- (5) Introduction to lichenology. Instructor: Dr. Adriano A. Spielmann.

Daily virtual "happy hours" on Wonder.me, where everyone could interact in a more informal way, were also well-attended. These happy hours were also where important meetings happened—most notably, the GLAL - "Grupo Latino Americano de Liqueñólogos", and the first IDEA (Inclusion, Diversity, Equity, and Accessibility) meeting within an IAL Symposium (read more about it on pages 31-32). Finally, we would like to express our most sincere gratitude to all who made the effort to collaborate and be part of the IAL9 online symposium. We also thank the IAL Council (2016-2021) and IAL9 Scientific Committees for their invaluable services to our event and community (<https://doity.com.br/ial9/blog/comitees>).

We note that for all IAL9 registered participants, recordings are still available until January 10th 2022 via the Doity Play link you received by email—don't miss the opportunity to check out all the talks you missed! For more details, please visit our website at <https://doity.com.br/ial9/> and abstract book (<https://doity.com.br/ial9/blog/ial-program-book>).

We hope you enjoy the collages prepared with screenshots taken during the event, and that you had a great online experience with IAL9!

IAL9 Organizing Committee

(Marcela E. S. Cáceres, Adriano Spielmann, Manuela Dal Forno, Luciana Canêz, Natália Koch)

and IAL9 Social Media Committee

(Ana Fávoro, Carlos Fraga Junior, and Laina Caroline Pereira).

INTERNATIONAL ASSOCIATION FOR LICHENOLOGY 9TH SYMPOSIUM



"UNLOCKING THE INNER LICHEN"
VIRTUAL - August 1-6 2021

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NATALIA KOCH
(UNIVERSITY OF MINNESOTA)



KEYNOTE SPEAKER:
FUNGI AND ALGAE: FROM INTERACTIONS TO RELATIONSHIPS



KEYNOTE SPEAKER:
TAXONOMY IN THE 21ST CENTURY: TRADE-OFF BETWEEN SCIENTIFIC ACCURACY AND PRACTICABILITY?



KEYNOTE SPEAKER:
USING NEXT GENERATION SEQUENCING APPROACHES TO BUILD ON THE IMPORTANCE OF LICHEN COLLECTIONS



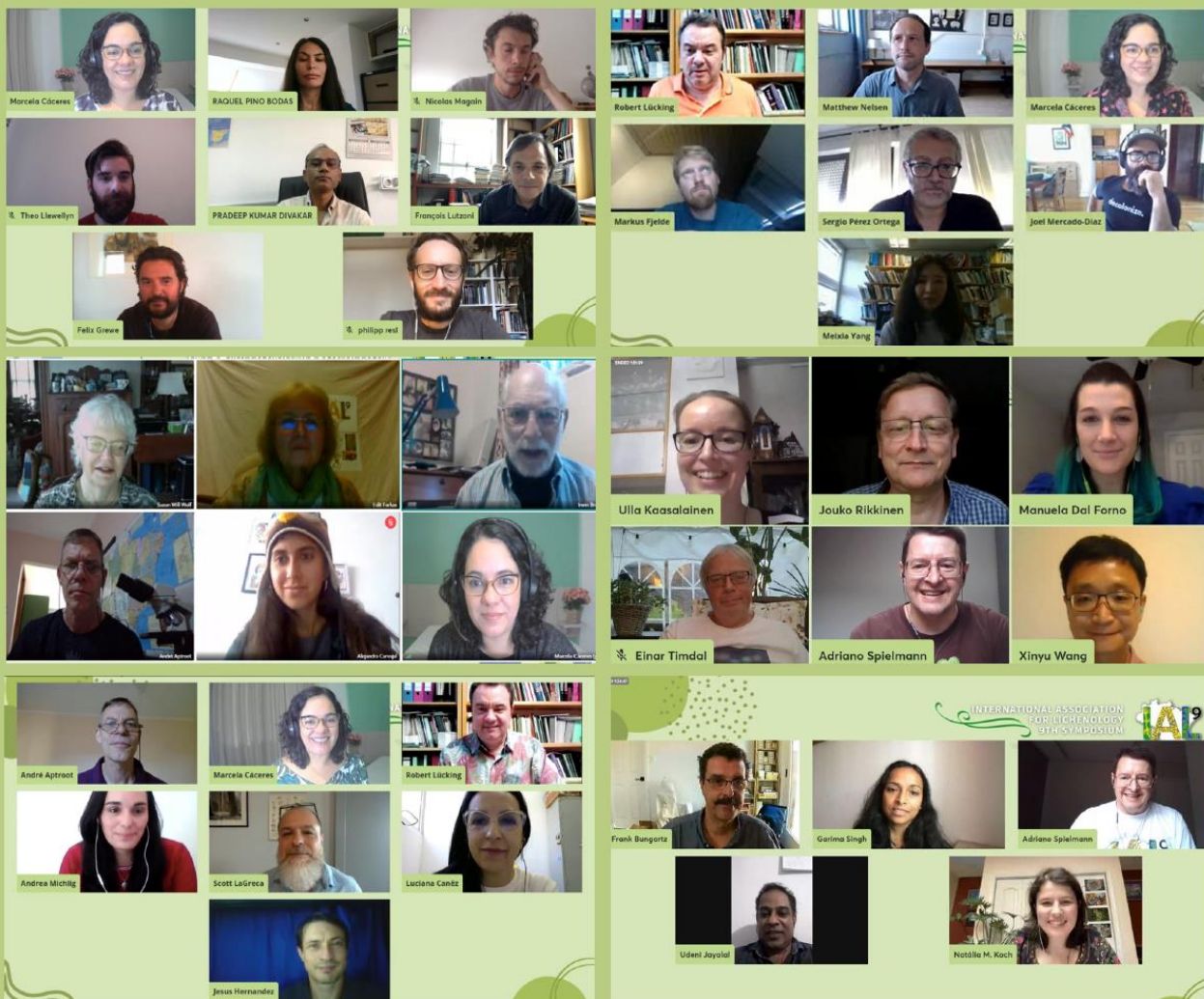
OPENING CEREMONY:
THE FOUR FLORAS OF BRAZIL



KEYNOTE SPEAKER:
YELLOW, ORANGE, RED ALERT: HOW TO MAKE SENSE OF PROCESSES OF DIVERSIFICATION AND GENERA DELIMITATION IN THE TELLOPHISTACEAE

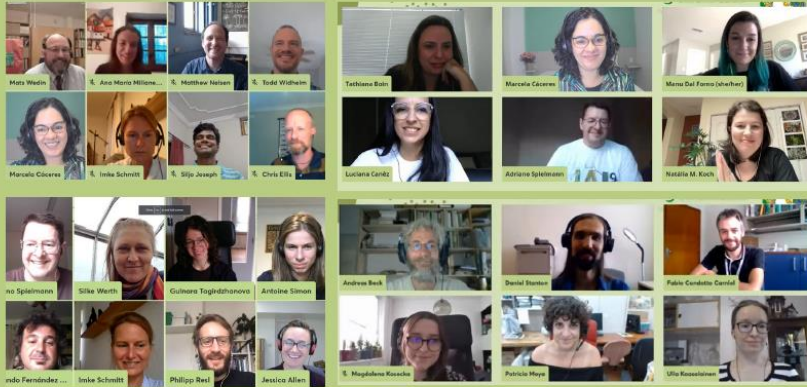


KEYNOTE SPEAKER:
REMOTE SENSING OF LICHENS ACROSS SPATIAL AND SPECTRAL SCALES TO VISUALIZE TRAITS



INTERNATIONAL ASSOCIATION
FOR LICHENOLOGY
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- CHRISTOPHER ELLIS (ROYAL BOTANIC GARDEN EDINBURGH)
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- NATALIA KOCH (UNIVERSITY OF MINNESOTA)
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- LAINA CAROLINE DE SANTANA PEREIRA (UNIVERSIDADE FEDERAL DE SERGIPE)



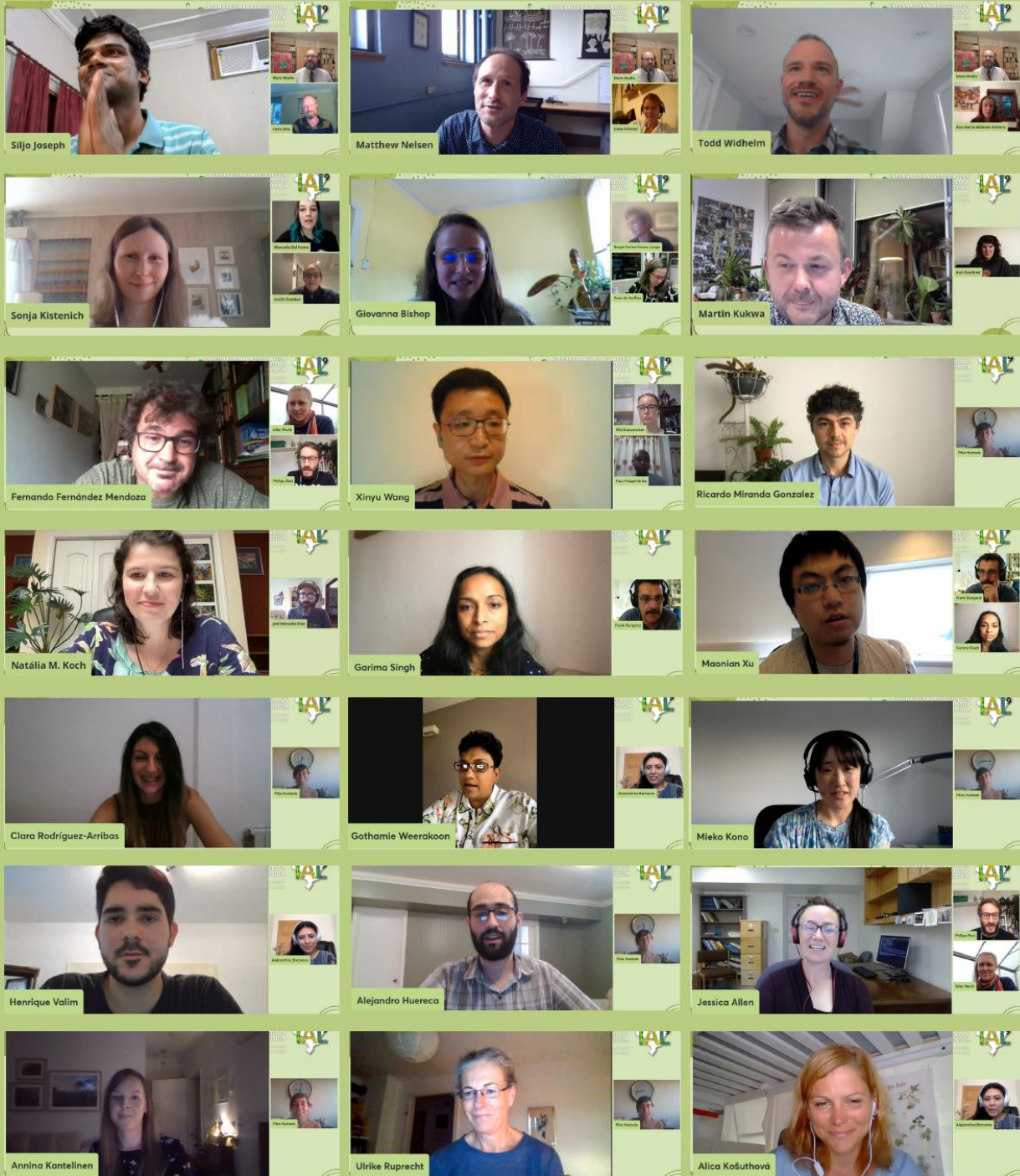
IAL General Meeting



INTERNATIONAL ASSOCIATION
FOR LICHENOLOGY
9TH SYMPOSIUM



"UNLOCKING THE INNER LICHEN"
VIRTUAL - August 1-6 2021



PERSONAL REFLECTIONS ON IAL9

I'd like to start by saying how grateful I am to Marcela Cáceres and the team of colleagues working with her (including Adriano Spielmann, Luciana Canêz, Manuela Dal Forno, Natália Koch, among others) to organize this meeting not once (which is already an incredible amount of work), but twice! The staggering amount of time and effort devoted to coordinating this was immediately clear. The meeting proceeded seamlessly, and was packed full of engaging and informative talks, workshops and discussions. A HUGE thank you and congratulations to all involved in coordinating this very successful meeting!

As always, I was impressed by the methodological advances that were utilized and embraced by our community, which enabled longstanding questions to be addressed in a new light, while simultaneously highlighting the diversity and complexity of the lichen symbiosis. Lichens continue to inspire me; the more I learn about them, the more intrigued I become. This meeting continued to foster that sense of wonder and excitement in me, and I can't wait to see what discoveries are next! Thank you colleagues and friends for your ingenuity and determination.

A major benefit of the virtual format is that it helped level the playing field and made it easier for colleagues from around the world to easily attend. Financial hardships and barriers represent a major impediment to meeting attendance, and the virtual format helped diminish some of these barriers. The virtual format also enabled me to invite undergraduate summer interns working with me to their first scientific conference. They were thrilled to be part of it, and were full of questions, eager to hear and learn more. This provided a great teaching and learning opportunity as I was able to speak with them after talks and discuss specific findings, broader concepts, and the history of this research.

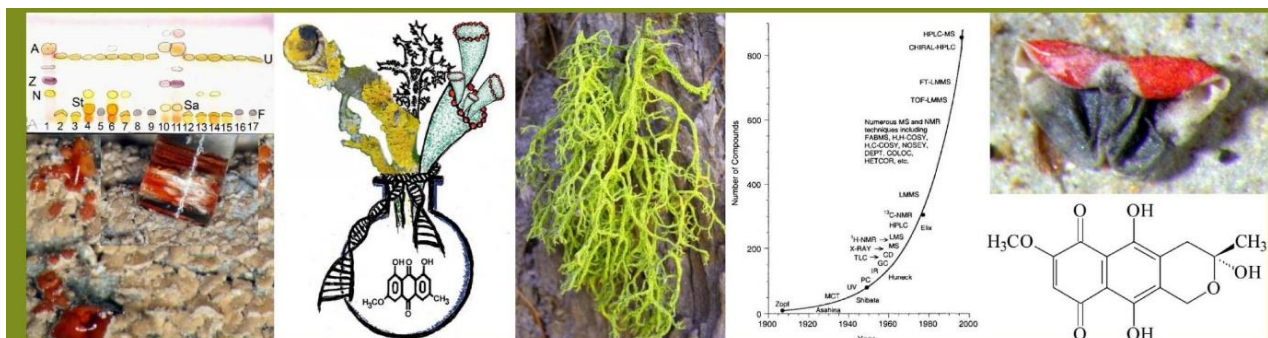
I was especially struck by, and grateful for, the efforts made towards increasing diversity and representation among speakers and session moderators. And while I was unable to participate, I was thrilled that several colleagues (Joel Mercado-Díaz, Manuela Dal Forno, Natália Koch) established a committee devoted to ensuring diversity, equity and inclusion in the IAL. I am very grateful to and commend our colleagues for this step forward, and to our leadership in the IAL (President François Lutzoni and the Council) for recognizing its importance.

On a personal note, I was very grateful to receive the Henssen Award, and have many friends and colleagues to thank for always being so generous with their time and providing me with so many opportunities to pursue my interests (including H. Thorsten Lumbsch, Robert Lücking, C. Kevin Boyce, Richard Ree, Susan Will-Wolf and Andrea Gargas). Thank you to all for this honor – I am very humbled and appreciative.

Finally, while I was of course disappointed to not see friends and colleagues in person, or to spend time in Brazil, I know shifting to a virtual format was the best decision, and the one I was most comfortable with personally. I still took great joy in seeing everyone online, and know this will all make the next in-person meeting (IAL10) all the more special! Looking forward to seeing you all in Trieste (perhaps in hybrid format!)

Matthew P. Nelsen

THE LICHEN CHEMISTRY SYMPOSIUM AT IAL9 WAS DEDICATED TO CHICITA CULBERSON FOR HER 90TH BIRTHDAY



Together with the main symbionts, lichens harbor a rich eukaryotic and prokaryotic microflora. The result is a vast and varied secondary chemistry, a trove of small molecules connecting and integrating the lichen's inner ecosystem. Recently, the field of lichen chemistry has expanded and diversified as new chemical and genomic approaches explore the richness, spatial distribution, and function of the thousands of compounds and of their producers. The power of the true and tried workhorses of lichen chemistry, TLC and HPLC, is being enhanced by the addition of Photometric Diode Array detectors and Mass Spectrometry. Very recently, the use of laser-based imaging mass spectrometry has allowed direct in situ visualization and localization of compounds in unprecedented detail. The concurrent application of genomic and genetic tools is linking the chemistry to its genes and their expression. The interplay between the genetic and chemical networks (genes produce chemicals which affect genes which produce chemicals which ...) opens rich and exciting new vistas into the biology of the lichen microcosm.

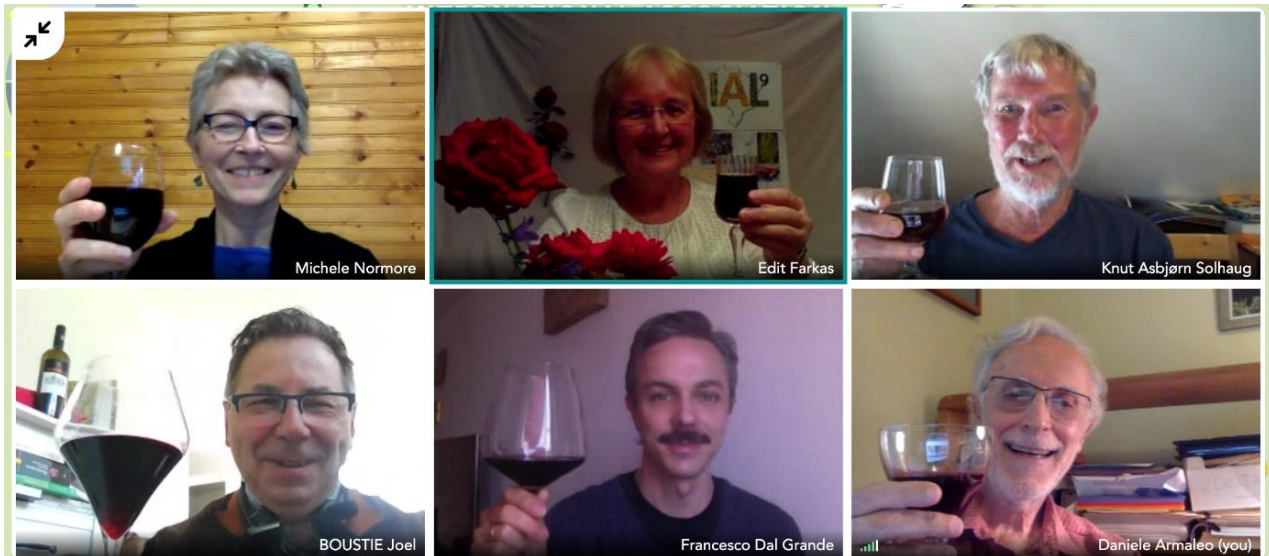
Summary of the symposium „*The expanding and diversifying field of lichen secondary chemistry*”, held on August 4, 2021.

Chicita Frances Culberson was an exceptional contributor to lichen chemistry and to the understanding of its biological ramifications. Due to the closeness of her 90th birthday to the timing of IAL 9 (she was born on November 1, 1931 in Philadelphia, Pennsylvania) we decided to dedicate the symposium to her. We organized a separate celebration using the Happy Hours platform of IAL9, where we raised glasses of wine in her honor.

Later, Daniele visited and informed her about the symposium and forwarded our enclosed photograph with the following text:

„*Dedicated to **Chicita Culberson** on the occasion of her 90th birthday for her outstanding life-long contributions to the research of lichen secondary metabolites*”

(The Presenters and The Organisers)



Presenters and organisers congratulate Chicita Frances Culberson on her coming 90th birthday during the IAL9 Symposium (From left to right: Michele Piercey-Normore, Edit Farkas, Knut Asbjørn Solhaug, Joel Boustie, Francesco Dal Grande, Daniele Armaleo).

Today, on November 1, 2021, we wish further good health to Chicita!

Edit Farkas (Vácrátót, Hungary) and Daniele Armaleo (Durham, USA)

CHICITA CULBERSON 90TH BIRTHDAY CELEBRATION

On Monday November 1, 2021, Chicita Culberson celebrated her 90th birthday on Zoom with beloved family and friends—including lichenological colleagues, as well as several Duke University alumni. About 20 people joined the party, some from as far as Guam and Australia (Figure 1). The birthday party was organized by Scott LaGreca, Molly McMullen (former manager of the DUKE cryptogamic herbarium) and Susan Gerbeth-Jones (former Duke Biology Department Head of IT).

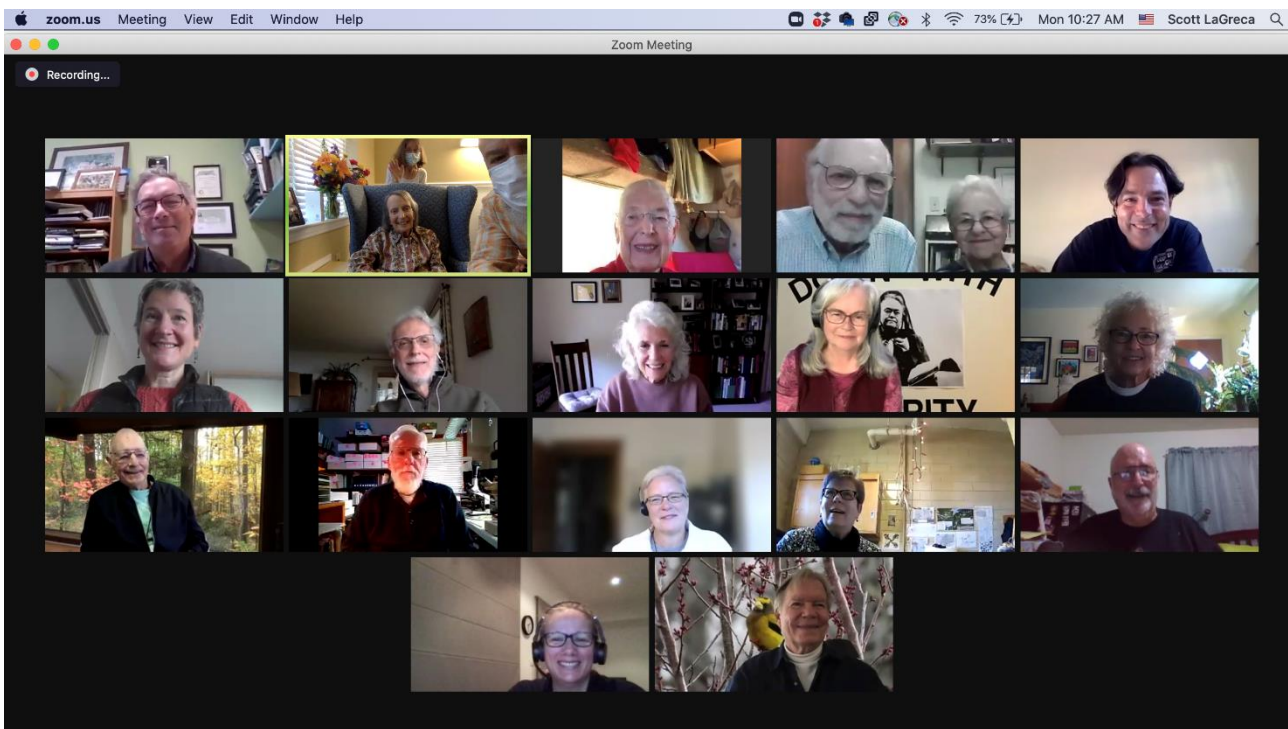


Figure 1. Chicita Culberson's 90th birthday party, held virtually on Zoom. Chicita (seated) can be seen in the highlighted box.

Attendees shared their favorite stories about Chicita. Some thanked her for setting an example for them as an inspirational, dedicated, pioneering female scientist. Others of us expressed our gratitude for her training us in Thin Layer Chromatography (TLC) for lichens (the TLC methods she developed for lichens are now, of course, standard in lichenology labs all over the world). Ernie Brodo presented a slideshow entitled “Chicita Culberson—Recollections of an Almost-Student” (Figure 2), so titled because Ernie had originally considered becoming a graduate student of the Culbersons! The presentation included lovely photos and memories of Chicita and her beloved husband, the late Bill Culberson.

Chicita very much enjoyed seeing everyone—she was all smiles, even during our less-than-perfect group-sing of “Happy Birthday to You!”

Happy Birthday, Chicita!

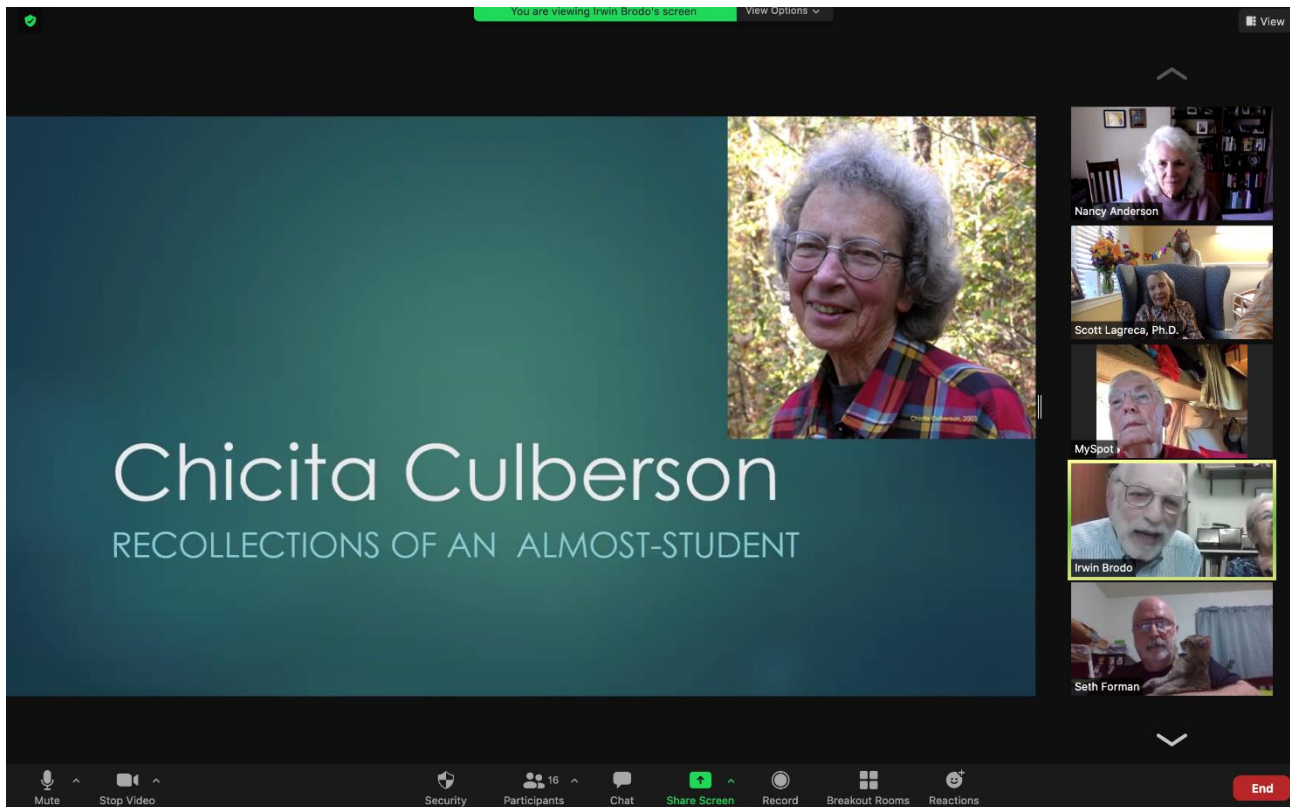


Figure 2. Ernie Brodo and his slideshow honoring Chicita Culberson.

Scott LaGreca
Collections manager, William L. Culberson & Chicita F. Culberson Lichen Herbarium & Library,
Duke University, Durham, North Carolina USA

REPORT ON THE THIRD LICHEN PHOTOBIONT SYMPOSIUM, CZECH REPUBLIC, SEPTEMBER 2021

The third Lichen Photobiont Symposium was a follow-up to two fruitful workshops focused on the lichen photobiont genus *Trebouxia* in Trieste, Italy (2016) and Valencia, Spain (2018). It was organized by Pavel Škaloud and his lab members in a mountain cottage accessible only on foot in Krkonoše (Giant Mountains) National Park in the Czech Republic. It was generously funded by the Primus Research Program SCI/13 of Charles University, Prague. Altogether, 39 participants from 17 research institutions representing nine countries attended.

This time, the scope of the meeting was extended to include all lichen photobiont genera. And indeed, talks and posters on a large number of photobionts of Trebouxiophyceae, Ulvophyceae and cyanobacteria were presented. A broad range of aspects of photobiont biology were dealt with, including e.g. diversity, specificity, ecology, distribution, dispersal, physiology, ultrastructure, and even smell. Additionally, novel techniques and approaches for the study of lichen photobionts were introduced.

In addition, a late afternoon microscopy workshop focusing on aerophytic green algae was organized. Cultures of various lichen photobionts as well as natural aerophytic mixed samples were demonstrated. Some *Trebouxia* (obviously free-living) and *Trentepohlia* cells were found in the latter. The participants also enjoyed a half-day field trip up to the ridge of the Krkonoše mountains, where they experienced the harsh conditions of Czech tundra. Among the alpine lichen species encountered were, e.g. *Arctoparmelia centrifuga*, *Aspilidea myrinii* and *Rhizocarpon alpicola*.



Participants of the meeting before field trip (Photo: Natalia Koch).

The symposium was a very pleasant event. After a period of online meetings due to the COVID-19 pandemic, the participants enjoyed finally meeting their fellow colleagues in person. The social evenings were brilliant, and included an adventurous night game in the forest and a campfire with guitars and singing.

The next meeting will take place in 2024 in Gdańsk, Poland. We are all looking forward!

Ivana Černajová

THIRD LICHEN PHOTOBIONT SYMPOSIUM, “PATEJDLOVA BOUDA”, ŠPINDLERŮV MLÝN, CZECH REPUBLIC, SEPTEMBER 27-29, 2021

The third Lichen Photobiont Symposium took place in Špindlerův Mlýn, Czech Republic, on 27–29 September 2021. The meetings were organized by the Department of Botany, Faculty of Science, Charles University in the Czech Republic under the leadership of Pavel Škaloud. The symposium was attended by more than 40 people representing various scientific units from different countries, e.g. the Botanical Research Institute of Texas; Duke University; Field Museum of Natural History; Polish Academy of Sciences; Real Jardín Botánico; Slovak Academy of Sciences; University of Gdańsk and University of Valencia (for a full list of participants and titles of all presentations and posters, see <https://botany.natur.cuni.cz/algo/symbio/index.html>).

The meeting began on Monday, 27 September, in Prague, with a visit to the interactive periodic table as an exposition in the building of Department of Geography and Geology at the Faculty of Science, Charles University. The guide put us in contact with the elements in a pure form. It was a nice educational experience.

Then we all gathered at a designated place, from where the bus took us to the beautiful mountain cottage called “Patejdlova bouda”, situated in Giant Mountains National Park, at an altitude of 972 metres above sea level.

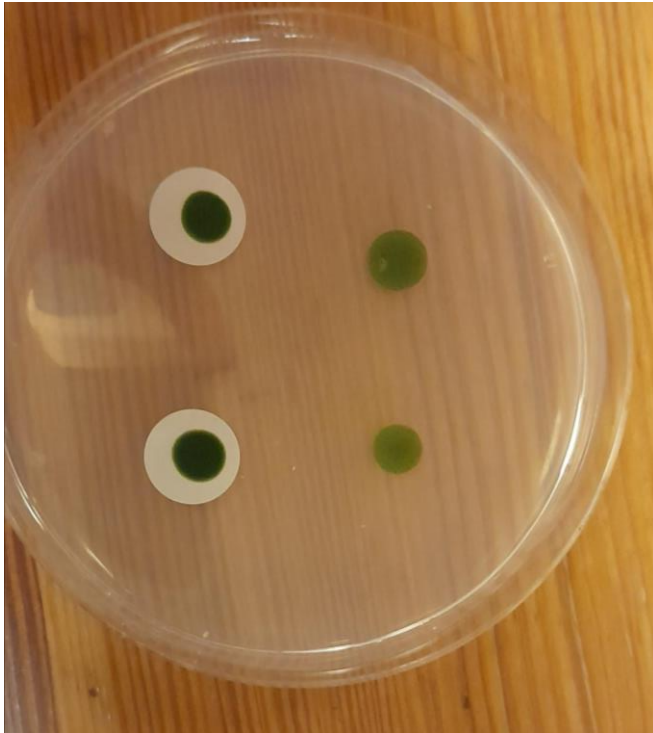
After a delicious Czech-style dinner, we listened to an interesting lecture about Giant Mountains National Park from one of the rangers. We will all forever remember the harsh conditions of “terrible tundra”.

Three sessions were held during the second day of the symposium. The first one, entitled “Photobiont diversity”, was chaired by organiser Pavel Škaloud. Four lectures were presented, including one by Joukko Rikkinen (University of Helsinki) on the diversification of cyanobacteria. The theme of the second session, led by Natália Koch (University of Minnesota) was “New methods and ecology”. We listened to four lectures in that session also; one of them, by Andreas Beck (Botanische Staatssammlung, München) was about the use of μ CT as a helpful tool for analysing 3D lichen structures. The last session of the day, entitled “Diversity of photobionts, physiology”, led by Lucia Muggia (University of Trieste) included six presentations. One of them, by Veronica Malavasi (Charles University) was about the diversity of free-living green algae.

Another highlight of the second day of the symposium was a microscopic workshop conducted by Pavel Škaloud and his team. During the course we were able to see, under a high-resolution microscope, different species of photobionts that associate with lichens, e.g. the genera *Asterochloris* Tschermak-Woess, *Trebouxia* Puymaly and *Vulcanochloris* Vančurová, Peksa, Němcová et Škaloud. In addition, as a special surprise from the organisers, we also tasted photobionts, in the form of delicious cookies. It is probably thanks to these snacks that we were able to absorb so much new information about photobionts in the lichen symbiosis. At the end of the day, there was a poster session.



Patejdlova bouda (Photo: E. Ossowska).



Trebouxia in a Petri dish (Photo: E. Ossowska).



Trebouxia on a cookie (Photo: E. Ossowska).

On the last day of the Symposium we were surprised by a small change of plans. The organizers decided to postpone the last segment of presentations to the afternoon and instead start our day with a lovely trip to the Giant Mountains National Park. Our destination was the two peaks of Velký Šišák, at 1410 m and Vysoké Kolo at 1509 m, respectively. The weather was sunny and amazingly good considering it was the end of September. During our trip, heading toward our first stop Martinova bouda, we were able to observe some lichen species e.g. *Hypogymnia physodes* (L.) Nyl., *H. tubulosa* (Schaer.) Hav., *Pseudevernia furfuracea* (L.) Zopf., and many species of the genus *Cladonia*. But besides interesting lichenized fungi, we also observed species of vertebrate animals. Actually it was one very adorable pony.



The pony that we encountered during the trip (Photo: E. Ptach).

When we arrived at our first stop, it was time to rest, eat, and admire the beautiful view. To reach the Vysoké Kolo peak, we had to overcome countless huge rocks that formed the path. On the rocks we noticed many specimens of *Rhizocarpon geographicum* (L.) DC. and other species from this genus. At some point, we crossed the Polish-Czech border.



View of the Polish-Czech border (Photo: *L. Ptach*).



Rocks covered by *Rhizocarpon geographicum* (Photo: *E. Ossowska*).



Vysoké Kolo (Photo: E. Ossowska).

After returning to Patejdlova bouda, the last paper session of the symposium, entitled "Photobiont diversity", started. Four lectures were given during the first part of the session, led by Ivana Černajová (Charles University) including two of our presentations, concerning photobionts in the lichen genus *Loxospora* A. Massal., and photobiont diversity in Bolivia using metabarcoding. The second part of the session was chaired by Jana Steinová (also from Charles University) and also comprised four lectures. One of the lectures featured Silke Werth (Ludwig Maximilian University, Munich) talked about ecological specialisation of photobionts in *Ramalina menziesii* Taylor. All the presentations and posters presented during these two days were very interesting, so it is not surprising that the speakers had to answer a number of questions, some very inquisitive.

The organisers also took care of the social evenings. A guided walk around the cottage took place on Tuesday night. In turn, a bonfire was held on Wednesday. Warming up by the fire, under a sky full of stars and with the sound of a guitar, we ended the third Lichen Photobiont Symposium.

We sincerely thank Pavel Škaloud and his team for the opportunity to meet in such a friendly atmosphere and in such a wonderful, natural setting. We would also like to invite you to the fourth Photobiont workshop, which will be organised in Poland at the Faculty of Biology, at the University of Gdańsk in 2024.



Bonfire (Photo: E. Ossowska).

Magdalena Kosecka, Emilia Ossowska and Lucja Ptach
University of Gdańsk

THIRD LICHEN PHOTOBIONT SYMPOSIUM 27.-29.9.2021

I had the chance to participate in the third Lichen Photobiont Symposium 27.-29.9.2021 organised at the Krkonoše National Park in the Czech mountains. This was the first onsite scientific conference I attended, allowing me to finally meet colleagues with familiar names from publications I've read in real life. During these three days we got a snapshot of what the lichen photobiont community has been working on recently, and partook in numerous fascinating discussions on all aspects of lichenology. It was especially fantastic for me to see the vivid cooperation and collaboration between phycologists and lichenologists to understand lichen photobiont biology. The venue was truly amazing, the views from the field trip spectacular, and the social program—from a night glowtrail in the woods to Trebouxia-cookies to a traditional Czech bonfire night—just fantastic. I cannot thank our Czech hosts enough!

*Niko Johansson, PhD Candidate
Finnish Museum of Natural History LUOMUS
University of Helsinki*

LICHENOLOGICAL NEWS FROM INDIA

INDIAN LICHENOLOGICAL SOCIETY (ILS) ELECTS NEW EXECUTIVE COUNCIL

The ILS recently elected its new executive council, which took charge on 28-09-2021. The list of the elected office-bearers and members are as follows:

President: Dr. D.K. Upreti, CSIR-National Botanical Research Institute (CSIR-NBRI), Lucknow

Vice-President (Outstation): Dr. T.A.M. Jagadeesh Ram, Botanical Survey of India, Coimbatore

Vice-President (Head Quarter): Dr. Vertika Shukla, Dr. BB Ambedkar University, Lucknow

Secretary: Dr. Gaurav K. Mishra, CSIR-NBRI, Lucknow

Joint Secretary: Dr. Rajesh Bajpai, CSIR-NBRI, Lucknow

Treasurer: Dr. Komal K. Ingle, CSIR-NBRI, Lucknow

Chief Editor (CBA): Dr. G.P. Sinha, Ex-Botanical Survey of India, Allahabad

Managing Editor (CBA): Dr. Sanjeeva Nayaka, CSIR-NBRI, Lucknow

Website Manager: Dr. Siljo Joseph, CSIR-NBRI, Lucknow

Executive council members

1. Prof. Jayashree Rout, Assam University, Silchar
2. Dr. P. Ponmurugan, Bharathiar University, Tamil Nadu
3. Dr. Bhaskar Punjani, Smt. S.M. Panchal Science College, Talod
4. Dr. Yogesh Joshi, University of Rajasthan, Jaipur
5. Dr. Biju Haridas, KSCSTE-Jawaharlal Nehru Tropical Botanic Garden and Research Institute, Palode
6. Dr. Himanshu Rai, TERI-School of Advanced Studies, New Delhi
7. Dr. Farishta Yasmin, Nowgong College, Nagoan
8. Dr. Jatinder Kumar, CSIR-Indian Institute of Integrative Medicine, Jammu
9. Dr. Santosh Joshi, Invertis Univeristy, Bareilly
10. Dr. Sumesh Dudani, Indian National Trust for Art and Cultural Heritage, New Delhi
11. Mr. Jyoti Tandon, CSIR-NBRI, Lucknow

ILS TO START E-NEWSLETTER

The ILS council decided to publish its annual e-newsletter entitled “ILS eLetter” by the end of every year. The newsletter will publish lichenological news, popular articles and interesting information. The editorial board of the ILS eLetter is as follows:

Editor: Dr. Sanjeeva Nayaka, CSIR-NBRI, Lucknow

Associate Editor: Dr. Siljo Joseph, CSIR-NBRI, Lucknow

Editorial board members

1. Dr. D.K. Upreti, CSIR-NBRI, Lucknow
2. Dr. G.P. Sinha, Ex-Botanical Survey of India, Allahabad
3. Dr. Yogesh Joshi, University of Rajasthan, Jaipur
4. Dr. Bramha N. Singh, CSIR-NBRI, Lucknow
5. Dr. Stephen Sequeira, Maharaja's College, Ernakulam

WEBINAR ON CRYPTOGAMS

The ILS, in association with Department of Botany, Soban Singh Jeena University, Almora organized a ‘National webinar on cryptogams and their role in environmental conservation’ on 4th July 2021. Prof. R.C. Dubey, Gurukul Kangri University, Haridwar presented a keynote address. Dr. B.S. Kholiya, Botanical Survey of India, Sikkim presented a talk on pteridophytes. The other four resource persons (Drs. A.K. Asthana, Sanjeeva Nayaka, Suchi Srivastava, S.K. Rath) were from CSIR-NBRI, Lucknow; they delivered talks on bryophytes, lichens, fungi and algae. Prof. N.S. Bhandari, Vice-Chancellor of SSJ University was the Chief Guest of the event. The webinar program was coordinated by Dr. Balwant Kumar, Head, Department of Botany.

LICHEN IDENTIFICATION AND BIOPROSPECTING WORKSHOP

CSIR-NBRI, Lucknow organized three days virtual workshop on “Integrative Systematics of Lichens – Identification to Bioprospecting” during 5 – 7th July 2021. The workshop was sponsored by Science and Engineering Research Board, New Delhi under Accelerate Vigyan Karyashala Scheme. Originally the workshop was planned for physical mode with hands on trainings, however due to second wave of COVID-19 pandemic the virtual mode was opted. A total of 32 research scholars and post graduate students participated in the workshop. During these three days 20 resource persons delivered 25 lectures on topics such as identification of lichens by classical and molecular methods, chemistry of lichens, utilization of lichens for biodeterioration, biomonitoring air pollution and climate change studies, application of GIS tools for predicting distribution of lichens, bioprospecting lichens for biological activities, and classification and nomenclature. The workshop was inaugurated by Prof. S.K. Barik, Director, CSIR-NBRI and coordinated by Dr. S. Nayaka

WORKSHOP AND CONFERENCE ON LICHEN RESEARCH

The Department of Biotechnology and Sponsored Research & Industrial Consultancy Cell (SRICC), Kumaun University, Nainital organized a two-day International Workshop with an online conference on lichen research during 29 – 30th July 2021. At this event the various dimensions of lichenological research and techniques were discussed by 13 resource persons. About 100 persons participated in the event. Prof. N.K. Joshi, Vice-Chancellor of Kumaun University inaugurated the workshop while Er. Kireet Kumar, Director, GBPIHED, Almora was the Chief Guest. The event was sponsored by the National Mission on Himalayan Studies, Ministry of Environment, Forest and Climate Change, New Delhi and coordinated by Prof. Lalit Tewari, Director, SRICC.

ILS FOUNDER'S DAY

The ILS organized its 'Founder' day' on 28th September 2021 by paying tribute to Dr. D.D. Awasthi, the Father of Indian Lichenology. Prof. Y.K. Sharma, former faculty of Lucknow University, Lucknow was the Chief Guest. Prof. Sharma recounted his acquaintance with Dr. Awasthi, and praised his contribution to lichen research in India. Also, Drs. K.P. Singh, S.R. Singh, D.K. Upreti, G.P. Sinha and P.K. Divakar recalled their own fond memories of Dr. Awasthi. Dr. Sanjeeva Nayaka welcomed all the participants while Dr. G.K. Mishra proposed a vote of thanks. The event was held virtually.

INTERNATIONAL WEBINAR ON AUTOTROPHIC CRYPTOGRAMS

The ILS, in association with CSIR-NBRI, Lucknow and the Department of Ecology and Environmental Science, Assam University, Silchar, organized a two-day International Webinar on Recent Trends in Autotrophic Cryptogam Research (RTACR-2021) during 7 – 8th October 2021. The autotrophic cryptogams included algae, lichens, bryophytes, and pteridophytes. About 200 people participated in the webinar and submitted 55 abstracts. The following resource persons delivered talks on various subjects: Prof. G. Subramanian, Bharatidasan University, Tiruchirappalli (algae); Prof. S.P. Adhikary, Visva Bharti University, Santiniketan (algae); Dr. Vaibhav A. Mantri, CSIR-Central Salt and Marine Chemicals Research Institute, Bhavnagar (algae); Dr. D.K. Singh, Botanical Survey of India, Kolkata (bryophytes); Dr. Asir Benniamin, Botanical Survey of India, Pune (pteridophytes); Dr. D.K. Upreti, CSIR-NBRI, Lucknow (lichens); Dr. A.E. Dulip Daniels, Scott Christian College (Autonomous), Nagercoil (bryophytes); Dr. Pradeep K. Divakar, Complutense University of Madrid, Spain (lichens); Dr. Robert Lücking, Botanischer Garten und Botanisches Museum, Freie Universität, Berlin (lichens); Dr. Helena Fernandez, Department of Organisms and System Biology, Oviedo University, Spain (pteridophytes). A total of 25 participants also presented papers, either as oral or poster presentations. The webinar was inaugurated by Prof. S.K. Barik, Director, CSIR-NBRI and Prof. D.C. Nath, Vice Chancellor, Assam University; and coordinated by Prof. Prof. Jayashree Rout, Assam University and Dr. Sanjeeva Nayaka, CSIR-NBRI.

SEMINAR ON LICHENS AND THEIR UTILIZATION

The ILS, in association with PG and Research Department of Microbiology, Hindustan College of Arts and Science, Coimbatore, organized a National Seminar on Lichens and their Utilization on 23rd October 2021. In the seminar, Dr. D.K. Upreti delivered a talk entitled 'Lichens for the benefit of mankind', and Dr. Sanjeeva Nayaka delivered his talk 'An introduction to lichens and associated fungi'. Dr. Lali Growther, Head, Department of Microbiology, coordinated the event.

Dr. Sanjeeva Nayaka
CSIR-National Botanical Research Institute
Lucknow
Email: nayaka.sanjeeva@gmail.com

THE 33ND MEETING OF THE ITALIAN LICHEN SOCIETY (SLI) - 2021

The 33nd meeting of the Italian Lichen Society (SLI) took place September 20-22, 2021 in the virtual mode. The meeting should have been organized in Genova, but due to the COVID-19 pandemic situation, the Society preferred not to meet in-person. We therefore met online, as has become usual for a year, of us from her/his house or working place. The organizers were four Italian lichenologists: Paolo Giordani and Paola Malaspina from the University of Genova; Elisabetta Bianchi of the University of Siena; and Chiara Vallese from the University of Bologna. The meeting took place with a program similar to what it would be in-person. Three main sessions focusing on (1) Ecology and Biodiversity, (2) Biomonitoring and Biology, and (3) Ecophysiology of lichens represented the core of the online symposium. The Society enjoyed the company of the invited speakers Prof. Yngvar Gauslaa (Norwegian University of Life Sciences) and Dr. Christopher Ellis (Royal Botanic Garden Edinburgh). A poster session was also included in the online program, the posters prepared as horizontal slides that were explained by the authors. Unfortunately, this year we cannot report on the field excursion, as it did not take place.

During the annual assembly, the Society elected a new president and organising committee, which is composed of (as photos below, from up left to bottom right): Juri Nascimbene (president), Sergio Favero Longo (secretary) Elisabetta Bianchi (member), Gabriele Gheza (member) and Lucia Muggia (member).

Lucia Muggia



continuity to the variety of ideas discussed, participants unanimously selected us, the authors of this piece, to form the first IAL IDEA Committee. While our efforts are still in the early stages, the Committee has since participated in all three monthly meetings of the newly elected IAL Council, thus serving as a first step to begin addressing many of these pressing challenges.

However, before serious work can be accomplished, we must do some basic homework. For starters, we need to decide the degree of “formality” we want the IDEA committee to have. Should the IDEA committee have a formal seat in the IAL Council or do we envision it as an advisory body? Keep in mind that we were elected *ad hoc* by open voice during this informal meeting, therefore, we should also be thinking about formal nominating and voting processes.

We are currently brainstorming the best ways to amplify diverse voices in leadership, but the many paths that can be taken to bring these goals to fruition make the decision-making ahead slightly complicated. For instance, should we increase the number of members-at-large to improve geographic representativity in the leadership of the Council? The IAL could do this by establishing, like other scientific societies, so-called “Chapters” or “Sections”, which would provide leadership at regional levels. Many of these changes would require modifications to the IAL Constitution, so above anything, it is of utmost importance that we come together as a society to discuss the options that best accommodate our needs. Consensus in this respect will be key.

At present, we are considering sending out a survey to assess the views and attitudes of our membership with respect to IDEA issues. We also consider urgent (and long overdue) the drafting and publishing of a formal IAL “Diversity Statement”. This document should ultimately establish where we have been, where we are at and what role we think inclusivity, diversity, equity, and accessibility should have in the “fabric” of our organization. If you think these are good ideas, have other suggestions/ideas that you think could bring “traction” to some of these goals, or would like to get involved in any of these tasks, it would be great to hear from you! Please feel free to reach out to any of us to share your thoughts – We will make our best to make your voice be heard. Also, be on the lookout for a follow up piece to this article in the July issue of this newsletter. Additional data on the historical backdrop and current state of IDEA issues within lichenology will be provided (and hopefully, some ideas on how we can move forward!).

A more inclusive, diverse, equitable and accessible lichenological future is possible. We all just need to do our part. Till the next one!

References

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Joel A. Mercado-Díaz¹, Manuela Dal Forno², Natalia Kóch³

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XV ENCUENTRO DEL GRUPO LATINOAMERICANO DE LIQUENÓLOGOS - ARGENTINA, 2022



GLAL XV

Argentina 2022

We are pleased to invite you to participate in the XV Meeting of the Latin American Group of Lichenologists (GLAL) that will be held virtually in Argentina in July 2022. The official languages of the meeting are Spanish and Portuguese, but presentations in English are also accepted. We invite you to present your studies in any area of knowledge of lichenology, with special emphasis on topics related to the South American lichen biota. Additional information concerning dates, presentation of abstracts and registration will be communicated in future announcements.

Contact address: glalxvargentina@gmail.com

- <https://glalxv.weebly.com/>

-Facebook: GLAL Argentina 2022

Dr. Alfredo Passo – President of the XV GLAL Meeting

XXI SYMPOSIUM OF THE BALTIC MYCOLOGISTS AND LICHENOLOGISTS 19–22 SEPTEMBER 2022, ILGA, DAUGAVPILS REGION, LATVIA FIRST ANNOUNCEMENT

On behalf of the Organizing Committee, we are happy to announce that the XXI Symposium of the Baltic Mycologists and Lichenologists will be held in Latvia, at the Study and Research Centre “Ilgas”, from 19 to 23 September, 2022. The «Ilgas», located in the nature park «Silene», 33 km from Daugavpils and 250 km from Riga, is a fully renovated manor complex. It houses a modern research centre consisting of a conference room, an accommodation area, laboratories, scientific collections, and a sauna. Further information will be available in March 2022. We hope we can get together during this challenging time and spent 4–5 beautiful and productive days in the Latvian forests.

*Polina Degtjarenko, University of Tartu (Estonia)
Rolands Moisejevs, Daugavpils University (Latvia)*

NEW COLLABORATORS INVITED TO PARTICIPATE IN A THESIS PROJECT ON LICHENS (GOMPHILLACEAE AND *STRIGULA* S.L.)

In the context of her PhD thesis at the University of Liège, Elise Lebreton and her team (supervisor Nicolas Magain and co-supervisor Emmanuël Sérusiaux) are looking for lichenologists who are able to collect and send lichens from the family Gomphillaceae and genus *Strigula* s.l.; the specimens must be recent to allow molecular analysis.

The geographical scope of the project is worldwide, and we are interested in both foliicolous and non-foliicolous lichens of these two clades.

Anyone already working on the molecular phylogenetics of these lichens is invited to contact us so that we can combine our efforts.

Any person who sends us specimens which provide usable and publishable DNA sequences will be associated as a co-author with future papers.

Please contact us if you wish to participate and find out more about the project: elise.lebreton@uliege.be or nicolas.magain@uliege.be

Elise Lebreton

THE SYMBIOGENE GIUV2016-330

The SYMBIOGENE GIUV2016-330 research team of the Universitat de València has obtained important funding, 2021-24, from the Generalitat Valenciana to develop the exciting project outlined below. In addition, four postdoctoral and two pre-doctoral contracts have been granted. We will organize several Workshops to invite external researchers who are specialists in different subjects and methodologies.

TITLE: Decline of epiphyte lichens and the symbiont microalgae across the Valencian Community: biomonitoring and genomic techniques applied to biodiversity conservation

ABSTRACT:

Lichens are unique indicators (bioindicators) of Global Change because they are sensitive to air pollution, as well as variations in temperature and water availability. Even subtle environmental changes may produce measurable changes in their diversity and structure across ecosystems, together with important effects on their physiology. The use of epiphytic lichen diversity to biomonitoring the effects of air pollution in Iberian Peninsula forest systems is widely documented. In the nineties, a network of sampling stations was established in northern Castelló and Teruel to examine the effects of air pollution on lichen communities and, more generally, on forest systems. The study of the same network afterwards may provide avenues to evaluating the impact of air pollution, especially photo-oxidants and deposition of nitrogenous compounds, on lichens and the forests where they occur. Even though the evaluation of the diversity and composition of lichen communities based on ecological indices is very useful, there is almost no information on how air pollution affects the performance, or survival, of the different biological components of lichen thalli (holobiome). We will therefore reevaluate the state of forests in that biomonitoring network using two approaches: the calculation of the IAP ecological index and the genomic survey of the fungi, algae and bacteria present in visually damaged and non-damaged lichen thalli. In particular, we will use metagenomics to determine changes in abundance and structure of fungal, algal and bacterial communities developing into or on the lichen thallus. Furthermore, the biomonitoring network will be extended to include additional stations located in ecologically-valuable forest systems from Castelló, València and Alacant. To detect possible diversity hotspots for the mycobiont and main phycobiont, their genetic diversity will be evaluated through a marker-based population genetics approach. This assessment will be accompanied by a cellular characterization of damages suffered by epiphytic lichens corresponding with different categories of visible damage using different techniques of microscopy. Although the damage observed in epiphytic lichens from the Valencian Community may have a multifactorial origin, it is known that oxidative stress is a common response to different biotic or abiotic stresses. We intend to determine the difference in susceptibility to stress in the majority of lichen microalgae, which can be a determining factor in the disappearance of certain lichens. Due to the almost lack of information on the symbiotic microalgae present in the nine selected epiphytic lichens that will be analyzed in this proposal, we expect to detect several unknown *Trebouxia* spp. and other phycobionts that may be of biotechnological interest. Therefore, we will characterize these algae not only on the basis of their response to different oxidative stresses, but also genetically and ultrastructurally. In conclusion, the new project addresses the urgency to generate new tools for biomonitoring the conservation status of forests using lichens and their different components, especially the

photosynthetic partners, or microalgae, whose multifaceted characterization is needed for promoting conservation guidelines, as well as possible biotechnological applications based on the tolerance to environmental changes.

Principal Investigators: Eva Barreno and Pedro Carrasco.

Researchers: César Bordenave, Myriam Catalá, Salvador Chiva, Francisco García-Breijo, Isaac Garrido-Benavent, Ayelén Gázquez, Francisco Marco, Patricia Moya, Lucia Muggia.

Eva Barreno

THE LICHENOLOGIST: AFRICA SPECIAL ISSUE

The Lichenologist aims to publish a Special Issue on African Lichens and Lichenology in 2022, with Guest Senior Editors: Richard Beckett (South Africa), Alan Fryday (USA) and Paul Kirika (Kenya). Submissions to the Special Issue opened from 1st July 2021, with a deadline for submissions on 28th February 2022. Topics for manuscripts are diverse, and could include, for example, taxonomy, systematics and phylogeny, biogeography, ecology and ecophysiology, and conservation. Please consider supporting lichenology in Africa through submission of a manuscript via the ScholarOne system (<https://mc.manuscriptcentral.com/lich>). Instructions for Authors remain as standard: <https://www.cambridge.org/core/journals/lichenologist/information/instructions-contributors>

Chris Ellis

THE JOURNAL OF FUNGI SPECIAL ISSUE: "ECOLOGY AND EVOLUTION OF LICHENS AND ASSOCIATED MICROORGANISMS"

Deadline for manuscript submissions: **31 May 2022**.

Dear Colleagues,

In a Special Issue of *Journal of Fungi* (JoF, IF: 5.816, <http://www.mdpi.com/journal/jof>) entitled "Ecology and evolution of lichens and associated microorganisms", we aim to bring together exciting new research contributing to advancements in lichen ecology and evolution of lichens and associated microorganisms. We welcome manuscripts presenting original research addressing consequential questions as well as theoretical investigations that advance our understanding of the following topics through extensive research in these areas.

Keywords:

- ecology and evolution of lichens and associated microorganisms
- population genetics and genomics of lichens and associated microorganisms
- molecular phylogenetics and phylogenomics of lichenized fungi
- metagenomic and metabarcoding of lichens and associated microorganisms

More information:

https://www.mdpi.com/journal/jof/special_issues/Lichens_sensors

Dr. Cécile Gueidan & Dr. Garima Singh
Guest Editors

SPECIAL ISSUE "PLANT DNA METABARCODING"

Dear colleagues,

I am writing to you to let you know we are now accepting contributions to a special issue of the journal *Plants* entitled "Plant DNA metabarcoding" is now open, and I think it could be of interest to lichenologists working with photobiont diversity, as well as on molecular and bioinformatics pipelines.

Prof. Massimo Labra and I are guest editors, and we invite you to submit your work.

More information is available here:

https://www.mdpi.com/journal/plants/special_issues/dna_metabarcoding

Discounts are available on publication fees. Please do not hesitate to contact us for further details or questions.

Elisa Banchi ebanchi@inogs.it

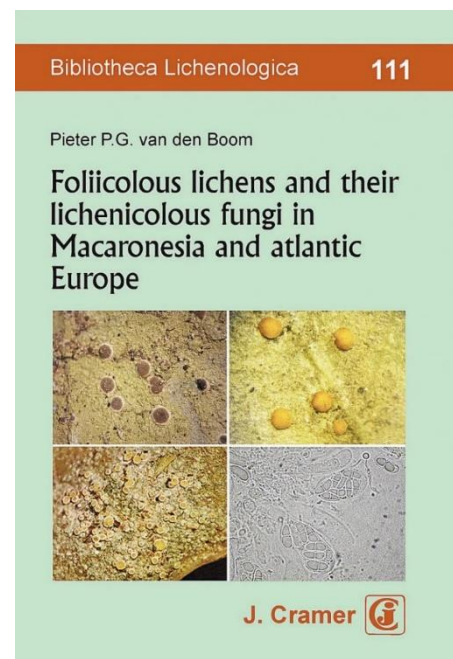
Massimo Labra massimo.labra@unimib.it

NEW BOOKS AND PUBLICATIONS

BOOK REVIEW

van den Boom, Pieter P. G. (2021) *Foliicolous lichens and their lichenicolous fungi in Macaronesia and atlantic Europe*. *Bibliotheca Lichenologica* 111. – J. Cramer in Borntraeger Science Publishers, Stuttgart. 197 pages. 101 figures. Paperback. ISBN 978-3-443-58090-2. Price: 89.00 €.

Foliicolous lichens, the symbiotic organisms inhabiting living leaves of vascular plants, are a frequent component of natural tropical and subtropical vegetation. They are especially diverse and well-studied in humid lowland and montane tropical forests, where they constitute an important fraction of biodiversity related to the phyllosphere. Foliicolous lichens are a polyphyletic assemblage with more than 800 species known worldwide. It is worth mentioning that a specific biota of lichenicolous fungi is also associated with this group of lichens. Outside the tropics, foliicolous lichens are less diverse and occur mainly in areas characterized by a mild climate. The *Foliicolous lichens and their lichenicolous fungi in Macaronesia and atlantic Europe* by Pieter P. G. van den Boom is a monographic treatment that extends our knowledge of foliicolous lichens to less-studied temperate and subtropical areas of continental Europe, as well as archipelagos located along the African and European coasts. The area of study is strongly influenced by the North Atlantic Ocean, and because of this it is an excellent habitat for foliicolous lichens. This book includes 138 species of lichens found in Norway, Denmark, the British Isles, the Netherlands, Belgium, France, Spain, Portugal, Canary Islands, Madeira, and the Azores, based on extensive collection trips made by the author. The documented species diversity varies between the four major regions studied, from 102 species recorded from Atlantic Europe, 47 species from the Azores, 49 species from the Canary Islands to 34 species from Madeira. The most common phorophytes inhabited by foliicolous lichens in the study area were the needles of conifer trees (e.g., *Abies*, *Cryptomeria*, *Picea*, *Pseudotsuga*, and *Taxus*), evergreen trees (e.g., members of *Lauraceae* and *Quercus ilex*), shrubs (e.g., *Buxus*



sempervirens, species of *Rhododendron* and *Ruscus aculeatus*), and climbing plants (e.g., *Hedera helix*). In addition, 12 species of lichenicolous fungi related to the studied group of lichens are also mentioned. Altogether the book lists 150 species, of which 54 are newly reported from the study area. Despite a significant number of species included in this monograph, it must be noted that only 38 of them are obligately foliicolous lichens. The rest of the species represents lichens that only occasionally grow on leaves, including 71 facultatively foliicolous microlichens and 29 macrolichens. These numbers show that unlike in the tropics, where obligately foliicolous lichens are the dominant group, in temperate regions the foliicolous lichens are mainly represented by facultatively foliicolous species. For each treated species, short morphological descriptions, local distribution, and habitat characteristics are provided. Also, color illustrations showing the morphology of 95 species are included. An important part of this work is a determination key provided by the author which certainly will help to determine foliicolous species in Atlantic Europe and neighboring countries. Thus, this monograph will significantly stimulate the growth of interest in studies on foliicolous lichens in temperate regions. In addition, as results of the taxonomic study, eight lichen species (*Arthonia portuensis* van den Boom, *Bacidina aeruginosa* van den Boom, *B. piceae* van den Boom, *Bryostigma lapalmae* van den Boom & Ertz, *Fellhanera azorica* van den Boom, *F. subnaevia* van den Boom, *F. subparvula* van den Boom, and *Micarea epiphylla* van den Boom) and two lichenicolous fungi (*Nectriopsis bacidinae* van den Boom and *Opegrapha hyperphysciae* van den Boom) are described as new to science. This book summarizes (and significantly updates) our knowledge of the diversity, ecology, and distribution of foliicolous lichens in Atlantic Europe and Macaronesia. In summary, this volume of *Bibliotheca Lichenologica* is a valuable piece of work that will be useful to any lichenologist interested in foliicolous lichens; and even more so to everyone who is studying the local lichen floras in European countries, and who are willing to include this particular and often-overlooked group of lichens in their studies.

Adam Flakus, Kraków

Ossowska, Emilia Anna (2021) Porosty z rodzaju *Parmelia* w Polsce. Studium taksonomiczne. (Lichens from the genus *Parmelia* in Poland: A taxonomic study). In Polish. Wydawnictwo Uniwersytetu Gdańskiego, Gdańsk. 221 pages. ISBN: 978-83-8206-289-2. Price: 31,50 PLN. Further information: <https://wydawnictwo.ug.edu.pl/produkt/porosty-z-rodzaju-parmelia-w-polsce-studium-taksonomiczne/>

The book is the first monographic study on species from the genus *Parmelia* in Poland. It contains the results of taxonomic and chemotaxonomic studies together with an analysis of the phylogenetic relationships between individual taxa. In addition, morphological and chemical characters helpful in the identification of *Parmelia* species in Poland are presented in the form of a key.



NEW PUBLICATION ON THE BIOCRUSTS OF GREAT PLAINS IN NORTH AMERICA

The North American grassland referred to as the Great Plains, where the American Buffalo used to roam, has been severely reduced and converted to other forms of vegetation. This vegetation type is still being destroyed by conversion to agriculture. This review article on the biocrusts of the Great Plains of North America documents a disappearing vegetation type and its associated biocrusts.

Steven, D.W., R. Rosentreter and N. Pietrasiak. 2021. Biological soil crusts of the Great Plains: a review/ Rangeland Ecology & Management 78: 213-219. ISSN 1550-7424, <https://doi.org/10.1016/j.rama.2020.08.010>

Roger Rosentreter

OBITUARIES

LUDWIK LIPNICKI (1947 - 2021)



Ludwik Lipnicki (Photo: Kazimierz Ligocki)

Dr hab. prof. Ludwik Lipnicki graduated from the Nicolaus Copernicus University in Toruń (1999). He was born in Łubianka near Gorzów. He lived and died in Drezdenko. He was a student of Zygmunt Tobolewski, the grandfather of Polish lichenology.

He focused his research mainly in the Bory Tucholskie and Bory Lubuskie regions. He also conducted research abroad, including the Faroe Islands and North America. He was mostly interested in lichens. As an ecologist, he was widely involved in the protection of nature, primarily in the Lubuskie region. He was the first person to advocate for the conservation of lichens in Poland, and he was the creator of the first preserves devoted to the protection of lichens—namely the Bór Chrobotkowy nature reserve named after prof. Z. Tobolewski. He compiled a list of endangered lichens of Bory Tucholskie. He was known, especially in Bory Tucholskie and in the Lubuskie Region, for this promotion of lichenological and ecological knowledge. He was well-known as the author of a study

on lichen succession substrates and pioneering, and as the editor of the monograph „Lichen protection - Protected lichen species”.

Dr. Lipnicki wrote several popular keys for the determination of lichens and several dozen scientific articles published in both Polish and international journals. As a conservation activist, he was a member of many scientific and social bodies and councils. He was one of the founding members of the Subsection and Lichenology Section of the Polish Botanical Society. He was also the organizer of the Lichenology Congress in Pszczew in 1988, as well as the organizer of the International Conference "Lichen protection – protected lichen species "in Brody in 2012. He was a great pedagogue, educator, and teacher. His students always remember his fantastic and interesting lectures. He was a long-time employee of the Academy of Physical Education in Poznań with its branch in Gorzów, though in his later years he was also associated with the The Jacob of Paradies University (Akademia im. Jakuba z Paradyża), also in Gorzów.



Ludwik Lipnicki with Piotr Grochowski in the field during the International Conference in Brody 2012 (Photo: Angelika Kulisch).

As a prose writer and poet, he was a member of the Polish Writers' Union and the ZAIKS Association. He made his poetic debut in 1986 with a poem in "Przyroda Polska". He published, among others „O tym ci powiem” (1991, poems), „Zapięła się jesień” (1994, poems), „Na niebie na ziemi” (2002, poetic prose), „Pan Iko. Powieść na wtorek” (2007, novel) and „Łapacz snów” (2011, poems). He was also the author of numerous literary reviews, poems and short stories featured in popular magazines. He was also a member of the first editorial team of the "Lamus" magazine in Gorzów. He was twice the laureate of the 2nd prize in the prose category at the Polish National Literary Competition, named after Zdzisław Morawski. In addition, he was honored as a Laureate of the Lubuskie Literary Laurel. He was a great organizer, and the soul of the party: he sang beautiful ballads accompanied by his guitar, especially those by Leonard Cohen, whom he adored. In his private life, he was a happy and fulfilled husband, a father to three daughters, and a grandfather.

He was a great Man for the 21st century.

dr Piotr Grochowski (student and friend)

KATALIN BARTÓK 1942 - 2021



Katalin Bartók in Szentendre, Hungary during her visit on 24 September 2016 (Photo: Edit Farkas).

Katalin Bartók (Katalin Váczy) was born on 22 July 1942 in Cluj Napoca (Kolozsvár). She was a botanist and lichenologist. She began studying biology and geography in 1959 at the Babeş-Bolyai University, graduating as a biologist-botanist in 1964; she received her PhD from the same institution in 1979.

At first she worked in the applied fields of agrochemistry and soil sciences; then in 1974 she became a researcher, and from 1990 a senior researcher at the Biological Research Institute in Cluj. Between 1999 and 2007, she worked at the Department of Biology and Ecology of the Hungarian Line, Faculty of Biology and Geology of the Babeş-Bolyai University as a docent. She continued teaching after her retirement until 2012. Some of her lichenologist students were: Noémi Andrea Zoltáni, Rebeka Bálint, Melinda Csergő, and Csilla Gabriella Hegyi.

Katalin's interests turned towards lichenology in the late 1970s, when she started to investigate the lichen flora of the Apuseni Mountains (especially the Vlădeasa and Bihor Mts).

She dealt with the taxonomy, floristics and ecology of Romanian Caliciaceae, Peltigeraceae, Lobariaceae, Pannariaceae and Nephromataceae, as well as *Diploschistes*, *Graphis*, *Opegrapha* and *Placynthium* species. She also worked on several local floristic and nature conservation studies in the Carpathians (e.g. Retezat Mts, Cozia Mts, Zarand Mts, Parâng and Lotru Mts, Poiana Ruscă Mts and Trascău Mts). Additionally, she played an important role in promoting and organizing the lichen

inventory of the Călimani Mts. In the 1990s she joined a pilot project mapping European lichens; it was during this research she collected important data on *Diploschistes muscorum*, *Gyalecta jenensis*, and *Synalissa symphorea*. She also participated in many bioindication and monitoring studies, most notably on heavy metal accumulation near industrial areas and radioactivity monitoring on the nuclear pollution of Chernobyl. She corresponded regularly with important lichenologists from various countries, e.g., Josef Poelt, Antonín Vězda, William Purvis, Anna Guttová, László Gallé.

Katalin was also active in the field of science history: for example, she completed post-humus publications of the manuscripts of her father, Kálmán Váczy (1913–1992) a renowned botanist and taxonomist. She died on 25 October 2021 in Cluj Napoca (Kolozsvár).

Florin Crişan (Cluj Napoca, Romania), Edit Farkas and László Lőkös (Budapest, Hungary)

PERSONALIA

IMKE SCHMITT'S LAB

Two postdocs have joined Imke Schmitt's Lab in Frankfurt, Germany. Dominik Merges studies interactions between genome and environment in the lichen symbiosis, and Henrique Valim is interested in the circadian biology of lichens.

NEW IAL MEMBERS

Elisabetta Bianchi, PhD, Department of Life Sciences, University of Siena Via PA Mattioli 4, I-53100 Siena, Italy, email: elisabetta.bianchi@unisi.it; Skype: bettina.blance. I graduated in Biology at the University of Florence (Italy) where I received a Ph.D. in Biology and Evolutionary Ecology for a multidisciplinary study on *Seiophora villosa* (Ach.) Frödén. My research interests include many botanical topics, mainly lichenological—specifically, floristic, taxonomic, ecological, and eco-physiological aspects of lichens in terrestrial ecosystems for their conservation. I am currently a member of the board of the Italian lichenological society.

Julieta Orlando, Associate Professor, Department of Ecological Sciences, Facultad de Ciencias, Universidad de Chile, Las Palmeras 3425, Ñuñoa, Santiago, Chile, phone: +569 9597 1115, email: jorlando@uchile.cl. The research my lab performs covers various topics within the areas of environmental microbiology and microbial ecology. We are especially interested in determining the diversity of microbial communities in various environments, and the biotic and abiotic factors that affect them. We are currently evaluating the factors that determine the successful establishment of interspecific associations and the potential contribution of the lichen microbiome using cyanolichen models, in particular representatives of the genus *Peltigera* that grow in southern Chile.

LIST OF SOCIETIES

Australasia: Australasian Lichen Society. Info: W.M. Malcolm, Box 320, Nelson, New Zealand 7040. Phone: (+64) 3-545-1660, e-mail: nancym@micro-opticspress.com
Journal: *Australasian Lichenology*, web-page: <http://nhm2.uio.no/botanisk/lav/RLL/AL/>

Brazil: Grupo Brasileiro de Liquenólogos (GBL), contact: Dr. Adriano Afonso Spielmann, (e-mail: adriano.spielmann@ufms.br), e-mail: BrazilianLichens@gmail.com;
web-page: <https://brazilianlichens.wixsite.com/website>

Central Europe: Bryologisch-lichenologische Arbeitsgemeinschaft für Mitteleuropa (BLAM). Contact: Martin Nebel, Wellengstr. 14, 70619 Stuttgart, Germany, e-mail nebel_martin@web.de, web-page: <http://blam-bl.de/>
Journals: *Herzogia* <https://blam-bl.de/herzogia/herzogia-ueberblick.html>, *Herzogiella*, web-page: <https://blam-bl.de/herzogiella-oben.html>

Colombia: Grupo Colombiano de Liquenología (GCOL). Info: Bibiana Moncada, e-mail: bibianamoncada@gmail.com;
web-page: <https://www.facebook.com/groups/485251978343916>

Czech Republic: Bryological and Lichenological Section of the Czech Botanical Society. Chairperson: Svatava Kubešová, e-mail: svata.kubesova@gmail.com, web-page: <https://botanospol.cz/cs/bls>
Journal: *Bryonora*, web-page: <https://botanospol.cz/index.php/cs/bryonora>

Ecuador: Grupo Ecuatoriano de Liquenología (GEL). Info: Alba Yanez, e-mail: albayanez8@gmail.com;
web page: <http://grupoecuatorianodeliquenologia.blogspot.com/>

Estonia: Mycology Society, Estonian Naturalists' Society, Struve 2, Tartu 51003, Estonia, Chairman: Külli Kalamees-Pani, e-mail: kulli.kalamees-pani@ut.ee
web-page: <http://mukoloogiau hing.ut.ee/avaleht> (in Estonian).
Journal: *Folia Cryptogamica Estonica*, web page: <http://www.ut.ee/ial5/fce/>

Finland: Lichen Section, Societas Mycologica Fennica. C/o: Botanical Museum (Lichenology), P.O. Box 7, FI-00014, Helsinki University, Finland. Info: Teuvo Ahti, e-mail: teuvo.ahiti@helsinki.fi
Journal: *Karstenia*, web-page: <http://www.karstenia.fi/index.php>

France: Association française de Lichénologie (AFL). Président: Joël Boustie, e-mail: joel.boustie@univ-rennes1.fr,
web-page: <http://www.afl-lichenologie.fr>.
Bulletin: *Bulletin d'Informations de l'Association française de lichénologie* (deux Bulletins annuels), web-page: http://www.afl-lichenologie.fr/Afl/Publications_afl.htm

Great Britain: The British Lichen Society (BLS). C/o: Royal Society of Biology, 1 Naoroji Street, London, WC1X 0GB, United Kingdom. President: Rebecca Yahr. Secretary: Eluned Smith. Email and Info: enquiries@britishlichensociety.org.uk For membership go to <https://my.britishlichensociety.org.uk/>,
Society web-page: www.britishlichensociety.org.uk/

Journal: *The Lichenologist* (accessible via Cambridge Core <https://www.cambridge.org/core/journals/lichenologist>); *British Lichen Society Bulletin* <https://www.britishlichensociety.org.uk/the-society/bls-bulletin>

India: Indian Lichenological Society. Address for correspondence: Lichenology Laboratory; CSIR-National Botanical Research Institute; Rana Pratap Marg, Lucknow-226001, U.P., India. President: Dr. D.K. Upreti. Secretary: Dr. Gaurav K. Mishra, e-mail: indianlichenology@gmail.com, webpage: <http://www.indianlichenology.com>

Iran: Lichenology Branch, Iranian Mycology Society, C/o: The Museum of Iranian Lichens. P.O. Box 33535111, Tehran, Iran, Iranian Research Organization for Science and Technology (IROST). Info: Mohammad Sohrabi, e-mail: sohrabi@irost.org

Italy: Società Lichenologica Italiana (SLI). President: Juri Nascimbene, Dipartimento di Scienze Biologiche, Geologiche e Ambientali Via Irnerio 42, Bologna, email: juri.nascimbene@unibo.it, web-page: <http://www.lichenologia.eu/>

Journal: *Notiziario della Società Lichenologica Italiana* (in Italian), web-page: http://www.lichenologia.eu/index.php?procedure=pubbl_not

Japan: The Lichenological Society of Japan (LSJ): President: Hiromi Miyawaki, e-mail: miyawakh@cc.saga-u.ac.jp,

web-page: <http://eng.lichenjapan.jp/>

Journal: *Lichen*, web-page http://lichenjapan.jp/?page_id=19

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

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

The Netherlands: Dutch Bryological & Lichenological Society (Bryologische +Lichenologische Werkgroep, BLWG). Contact: L.B. (Laurens) Sparrius, contact e-mail: sparrius@blwg.nl, web-page: <http://www.blwg.nl>

Journals: *Buxbaumiella* and *Lindbergia*, web-pages: www.buxbaumiella.nl (open access) and www.lindbergia.org (open access)

Nordic Countries: Nordic Lichen Society (Nordisk Lichenologisk Förening, NLF). President: Ave Suija, e-mail: ave.suija@ut.ee,

web-page: <http://nhm2.uio.no/lichens/nordiclichensociety/>

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

North America: American Bryological and Lichenological Society, Inc. (ABLS). President: Jon Shaw, contact e-mail: show@duke.edu,

web-page: <http://www.abls.org/>

Journals: *Evansia*, web-page: <http://www.bioone.org/loi/evia>; and *The Bryologist*, web-page: <http://www.bioone.org/loi/bryo>

North America, Northwest: Northwest Lichenologists (NWL). Info: Bruce McCune, contact e-mail: bruce@salal.us,

web-page: <http://www.nwlichens.org>

Newsletter: *Northwest Lichenologists Newsletter*, web-page: <http://www.nwlichens.org>

North America, California: The California Lichen Society (CALs). President: Tom Carlberg, contact e-mail: president@californialichens.org,

web-page: <http://californialichens.org/>

Bulletin: *Bulletin of the California Lichen Society*, web-page: <http://www.californialichens.org/calsbulletin/>

North America, East: Eastern Lichen Network. Info: Marian Glenn, e-mail: glennmar@shu.edu, web-page: <http://www.nybg.org/bsci/lichens/elin/>

Poland: Lichenological Section of the Polish Botanical Society (Polskie Towarzystwo Botaniczne). President: Beata Krzewicka, W. Szafer Institute of Botany Polish Academy of Sciences, Lubicz 46, PL 31-512 Kraków, Poland, Email: b.krzewicka@botany.pl, web-page: <https://pbsociety.org.pl/ind/sekcja-lichenologiczna/>

Slovakia: Slovak Botanical Society – Lichenological Working Group, c/o Institute of Botany, PSBC, Slovak Academy of Sciences, Dúbravská cesta 9, 845 23, Bratislava, Slovakia. Info: Zuzana Fačkovcová, e-mail: zuzana.fackovcova@savba.sk, web-page: <http://sbs.sav.sk/>
Journal: Bulletin Slovenskej botanickej spoločnosti, web-page: <http://sbs.sav.sk/SBS1/content.html> ; <http://ibot.sav.sk/lichens/>

South America: Grupo Latino Americano de Liquenólogos (GLAL). Info: Alfredo Passo, e-mail: alfredo.passo@gmail.com
Journal: *GLALIA*, web-page <http://nhm2.uio.no/botanisk/lav/RLL/GLALIA/>

Spain: Sociedad Española de Liquenología (SEL). President: Sergio Pérez-Ortega, e-mail: sperezortega@rjb.csic.es, secretary: María Prieto Álvaro, e-mail: maria.prieto@urjc.es; web-page: <http://www.ucm.es/info/seliquen/>;
Journal: *Clementeana*, web-page: <http://www.ucm.es/info/seliquen/cl.htm>

Sweden: Svensk Lichenologisk Förening (SLF). President: Martin Westberg, e-mail: martin.westberg@em.uu.se, web-page: <http://lavar.se>
Bulletin: *Lavbulletinen*, web-page: <https://lavar.se/lavbulletinen/>

Switzerland: Swiss Association of Bryology and Lichenology (BRYOLICH). President: Ariel Bergamini, e-mail: praesidium@bryolich.ch, web-page: http://www.bryolich.ch/index_en.html
Journal: *Meylania*, web-page: http://www.bryolich.ch/meylania/meylania_en.html

Venezuela: Grupo Venezolano de Liquenólogos (GVL). Info: Jesús Hernandez, e-mail: jeshernandezm2@gmail.com, web-page: www.bit.ly/lqvzla

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The cover-page illustration

Sticta aongstroemii Dal Forno, Moncada & Lücking (Ascomycota: Peltigeraceae) from a remnant of Atlantic Forest in Brazil near Campos do Jordão-SP (Photo: Manuela Dal Forno).