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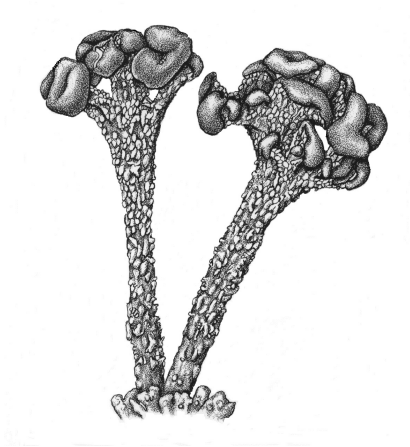

Official publication of the
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International Association for Lichenology

The **International Association for Lichenology** (IAL) promotes the study and conservation of lichens. It organizes symposia, field trips, and distributes a biannual newsletter. There is a listserver that enables on-line discussion of topics of interest. Webpages devoted to lichenology are also maintained by members of the Association. People wishing to renew their membership or become members of IAL are requested to send their subscription (one payment of 40 USD for 2012-2016) to either Treasurers.

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

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

IAL affairs are directed by an Executive Council elected during the last General Meeting. Council members elected at the IAL7 Symposium (Bangkok, Thailand, 2012) are listed below, and will serve until 2016.

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NEWS

NLF-excursion to Vadstena, 11–15 August 2013

Eric Acharius (1757-1819), the father of lichenology, who lived in Vadstena from 1789

Vadstena, the hometown of Eric Acharius, near Lake Vättern in central southern Sweden, will host the 20th biennial NLF-excursion. Accomodation is booked at Vadstena College on the lake shore, *http://www.vadstena.fhsk.se*. Accomodation for one person in a double room for four nights and all meals is c. 1500 SEK (c. 175 €); single rooms are also available. The Nordic Lichen Society will apply for funds in early 2013 to cover additional expenses, such as hiring a bus and a lecture room, and the cost of an Acharius' dinner. The excursion fee will be decided later, and announced in a first circular and on NLF's homepage as soon as possible: *http://nhm2.uio.no/lichens/nordiclichensociety*.

The programme will include: lichens and culture in historic Vadstena, especially Acharius' house, and surrounding region, the natural history of Omberg, posters and presentations, and the biennial meeting of NLF. Please inform Arne Thell (*arne.thell@botmus.lu.se*) or Ingvar Kärnefelt (*ingvar.karnefelt@biol.lu.se*) if you intend to participate and if you wish to present a poster or presentation no later than **1 April 2013**. Abstracts should be submitted until **1 May.**

A warm welcome awaits you in Vadstena!

Arne Thell and Ingvar Kärnefelt, Lund

Lichen course *Lichens as a tool for interpretation of environmental changes and management – post-graduated course*

28 January–1 February 2013, Lisbon, Portugal

This post-graduate course to be held at the Faculty of Sciences, Universidade de Lisboa provides basic information on the use lichens for the interpretation of environmental conditions and on the development of responsible scientific-based environmental management. The course covers: lichen symbiosis, species identification, ecophysiology, biomonitoring and data analysis.

The course includes lectures, lab-work and a one-day field-trip.

Application: send a 2-page CV and one paragraph to indicate why they wish to attend the course to Cristina Máguas (*cmhanson@fc.ul.pt*). Deadline for applications: **10 January 2013.**

Fee: free for 1st year PhD students in Biology (FCUL), Biodiversity, Genetics and Evolution (UL; UP) and Biology and Ecology of Global Changes (UL, UA); 20 € for PhD students from institutions of the PEERS network (CBA, CFE, ABG); 120 € for FCUL Master students and unemployed; 180 € for BTI, BI and other PhD students; 240 € for Professional and post-doctorates.

For more detailed info: *http://ecofun.fc.ul.pt/Activities/lichens2013/*

Silvana Munzi

Schedule of lichenology seminars at Eagle Hill, Maine in 2013

June 23–29 *Lichens and Lichen Ecology* with David Richardson and Mark Seaward

July 14–20 *Lichens, Biofilms, and Stone: Natural History Conservation* with Judy Jacob and Michaela Schmull

July 21–27 *Calicioid Lichens and Fungi in Old Growth Forests* with Steve Selva

Further information: *http://www.eaglehill.us/*

Anne Favolise

Address changes:

Lund herbarium (LD), Lund University, Botanical Museum, Box 117, SE-22100 Lund, Sweden

Martin Kukwa. Wita Stwosza 59, PL-80-308 Gdańsk, Poland. tel: + 48 058 523 61 61. E-mail: *dokmak@ug.edu.pl*.

The 10th International Mycological Congress, Bangkok, Thailand, August 3–8, 2014

The web page of the 10th International Mycological Congress (IMC10) is now available at *http://imc10.kasetsart.org/*. The early registration will be open in **1 July 2013** and submission of abstracts will be started in **July, 2013**.

The IMC10 covers following scientific topics: (1) Cell Biology, Biochemistry and Physiology; (2) Genomics, Genetics and Molecular Biology; (3) Plant, Human and Animal Pathogenesis and Disease Control; (4) Environment, Ecology and Interactions; (5) Phylogeny, Evolution and Systematics; (6) Diversity and Conservation; (7) Biotechnology and Applied Aspects.

REPORTS

Workshop on Teloschistales in Kristiansminde (Denmark), May 11–14, 2012

In May 11–14, the workshop *Teloschistales: towards a unified and phylogenetically based classification* was held in Denmark. This meeting was organized as part of the activities of the project *A multilocus phylogenetic study of the Teloschistales (Ascomycota) and the evolution of symbiotic systems* funded by the National Science Foundation (USA) and carried out by Ester Gaya and François Lutzoni (Duke University). The meeting was coordinated in close collaboration with Ulrik Søchting (University of Copenhagen), who took the lead in the local organization. The main goal of the meeting was to try to establish a classification of Teloschistales that would be agreed upon by all experts working on this complex group of lichens and would form a solid foundation for future studies. The workshop included both young researchers starting on the group as well as established experts and researchers from around the world . We expected not only to agree on a classification but also to boost taxonomic research on the group and trigger future joint collaborations. The meeting's schedule included a series of talks, field excursions and discussions.

The workshop was a success in both organization and participation, with most of the world's experts on Teloschistales involved; participants and activities are featured in the project website (*http://www.teloschistales.lutzonilab.net/*), where photos provided by some participants are included. The meeting was held in the beautiful field station of the University of Copenhagen in Kristiansminde, Sorø. The organization was impeccable. Ulrik did an excellent job; enlisting two extraordinary cooks, Lisbeth Knudsen and Ruth Bruus Jacobsen (volunteers from his laboratory), and even provided an aperitif of *Cladonia* from the famous restaurant NOMA! Participants gave interesting presentations on their current projects and Robert Lücking offered an enticing talk on methods. There were also several proposals of classifications,

Upper row: Reinaldo Vargas, Gökhan Halici, Lisbeth Knudsen, Patrik Fröden. Middle row: Ivan Frolov, Sergey Kondratyuk, Natalya Fedorenko, Ester Gaya, Yogesh Joshi, Arne Thell, Robert Lücking. Bottom row: Pere Navarro Rosinés, Louise Lindblom, Jan Vondrák, Ulrik Søchting, Ingvar Kärnefelt, Ruth Bruus Jacobsen, Ulf Arup, Karina Wilk. Not in the picture: François Lutzoni. Photo: R. Lücking

and warm debates that were enlivened by music on the accordion of Jan Vondrák, and homemade 'schnapps' provided by Ulrik. In summary, it was a successful meeting, whose first fruits may be seen in a series of papers on the phylogeny of Teloschistales by workshop attendees in the near future.

Ester Gaya, Duke University

Hungarian Lichenologists at the 7th International Symbiosis Society Congress: The earth's vast symbiosphere, 20–28 July 2012 Kraków, Poland

We were always aware that lichens are not the only symbiotic organisms, among others our colleagues study for example mycorrhiza fungi, still it was a fantastic feeling to see several hundreds of researchers who are studying other forms of the symbiosis and feel the special atmosphere of the Congress.

The younger one of us had possibility to listen more lectures than the older one and so she thinks that lichenology has a remarkable place among the subjects. It was really difficult to choose between so many interesting and outstanding talks which were often held simultaneously. It

is not suprising that for us lichenological talks had priority. Not only the sessions but also posters gave us new and useful information about cellular interactions in symbiosis (e.g. Meessen *et al*.: *In the initial steps of recognition of lichen symbionts based on morphological processes of growth patterns*), genomics in symbiosis (e.g. Armaleo *et al*.: *Decoding symbiosis: the two genomes of the lichen* Cladonia grayi), ecological implications of symbiosis (e.g. Sadowsky and Ott: *Primary producers in a tough symbiosis: the photobiology and stress physiology of Antarctic lichen photobionts*; Sadowska-Des *et al*.: *Comparison of genetic diversity of mycobiont and photobiont in the lichen* Lasallia pustulata; Grube: *Lichens and climate change: past end present*; Munzi *et al*.: *The physiological response of lichen symbionts to stress conditions*), interdisciplinary approaches to symbiotic inquiry (e.g. Lutzoni *et al*.: *A multidimensional exploration of plant-fungal symbioses and their associated shift in diversification rate*; Arnold *et al*.: *Emerging perspectives on endophytic and endolichenic symbioses*), and applied symbiosis (e.g. Riedel: *Medical/veterinary implications of symbiosis*; Forney: *Ecology of the human microbiome*), etc. The interactive workshop was an opportunity to learn more about living symbiotic systems from experts and to look at them under the microscope or watch them in short films. We very much enjoyed the presention of Sieglinde Ott about a symbiologist's second home, Antarctica.

The senior Hungarian participant felt that even if many important details presented on these organisms are known, no real synthesis has appeared on the subject. It is obvious that further

Photo 1. *Lichenologists visiting Institute of Botany of the Polish Academy of Sciences, Kraków. Photo: K. Wilk*

Photo 2. *Sieglinde Ott and Beata Krzewicka in the Bookstore of the Institute of Botany. Photo: K. Wilk*

research is essential for understanding symbiosis and studies on lichen symbiosis can contribute substantially. No doubt the times and congresses were different when Margalith Galun, Lynn Margulis and Gopi Podila were still present, but their work was duly acknowledged in Congress lectures *in memoriam* given by David Richardson, Douglas Zouk and Francis Martin.

A special highlight of our programme was when all lichenologists present in Kraków at that time (Daniele Armaleo, Stephanie Domaschke, Edit Farkas, Ludger Kappen with Mira Kappen, François Lutzoni, Jolanta Miądlikowska, Katalin Molnár, Silvana Munzi, Sieglinde Ott, David Richardson, Anna Sadowska-Deś, Sheeba Santhini Manoharan, Katarzyna Turnau, Virginia Zoll) enjoyed the hospitality of the Director and the lichenologists in the W. Szafer Institute of Botany of the Polish Academy of Sciences: Konrad Wołowski, Barbara Godzik, Lucyna Śliwa, Karina Wilk, Beata Krzewicka and Adam Flakus. Presentation on the scientific activity of the lichenological group by Lucyna Śliwa was followed by visits to the laboratories, herbarium, library and bookstore, followed by a reception with an opportunity to taste special Polish food, and a walk in the botanical garden and greenhouse guided by Jolanta Miądlikowska. Once again we realized how lichens are special among the symbiotic organisms and lichenologists are a unique and friendly group of researchers – our ”family” is incomparable.

Neither of us had attended a Symbiosis Congress before, so for us it was a dream come true.

We are grateful for the local organisers, especially to Lucyna Śliwa, who invited us as special guests and to the Polish Academy of Sciences and the Hungarian Scientific Research Fund OTKA 81232 for sponsorship.

Edit Farkas and Katalin Molnár, Vácrátót, Hungary

Additional information:

http://iss-symbiosis.org/Default.aspx?pageId=577811

http://www.eko.uj.edu.pl/symbiosis/index.html

XXV Congress of the Italian Lichen Society, 3–5 October 2012

The Italian Lichen Society was founded in 1987 by Pier Luigi Nimis (University of Trieste) and few other young Italian botanists who since the end of the 1970s had restarted lichenological studies in Italian universities, after several decades of decline. At the beginning of October 2012, after a quarter of a century, that event was celebrated during the XXV Congress of the Society, combining stimulating scientific sessions with pleasant social events. The Congress was organized with the collaboration of the Istituto Superiore per la Conservazione ed il

Opening ceremony of XXV SLI Congress: from left S. Loppi, A. Roccardi, G. Capponi, A.P. Recchia, G. Caneva. Photo: S. Martellos

Restauro, which hosted the scientific sessions in the amazing congress venue "Santa Marta al Collegio Romano", a Baroque deconsecrated church in the historical centre of Rome, with fine architectural decoration and frescoes by Baciccio.

A preliminary session was dedicated to the discovery of biodiversity in the internet age and to the prize-giving of the annual competition *Lichen and didactics*, the students of a primary school in Spilamberto (Modena, Emilia-Romagna) and from a secondary school in Rome being the winners of a stereomicroscope each. The first symposium dealt with lichens and monuments. A plenary lecture by Giulia Caneva (University of Roma III) was followed by several talks on the opportunity to remove or preserve lichen communities on different kinds of stonework. Lichen conservation was discussed in the second symposium, mostly focused on the urgent need to create a Red List for Italian Lichens. During the third session, dealing with ecology, physiology and biomonitoring, Stefano Bertuzzi (University of Trieste), winner of the first edition of the *Carlo Gaggi* award for PhD projects, showed his results on lichens and ozone. The scientific content also included a poster session and a guided tour of the Colosseum, where lichen colonization on monuments was clearly demonstrated in support of the congress presentations. In the evening, celebrations continued with a "banquet symposium" held in a restaurant in Trastevere, where all the founders of the Society received lichen paintings realized by the member Chiara Perri.

Enrica Matteucci

International scientific conference *Protection Lichen – Lichen Protected Species* and XXVI Polish Lichenologists Convention, 11–14 September 2012

The organizers and sponsors of the Conference were Prof. Ludwik Lipnicki and Dr Piotr Grochowski (E. Piasecki University School of Physical Education in Poznan, Laboratory of Biology and Nature Protection in Gorzów Wielkopolski), Bogdan Olejniczak and Paweł Mrowiński (Regional Directorate of State Forests in Zielona Góra, Forest Inspectorate Lubsko), and the Lichenological Section of Polish Botanical Society. The proceedings were held in the Nature and Forest Education Centre in Jeziory Wysokie – 'Bory Lubuskie' Forest Promotion Complex in western Poland, and participants were accommodated in the historic Brühl Palace in Brody.

In all, 53 lichenologists from Poland, Germany, Russia, England and Hungary participated. The main objectives of the meeting were the exchange of experiences in the protection of lichens, with attention paid to threats to endangered lichens in protected and unprotected sites (e.g. cities, industrial areas). The opening ceremony (in Brühl Palace) was attended by guests of honour representing the organizers, local authorities, institutions and organizations concerned with the protection of nature, and representatives of the sponsors. Honorary Patronage of the conference was held by the Marshal of the Lubuskie Voivodeship – Elżbieta Polak. During the opening ceremony, Prof. Mark Seaward, with his usual verve, gave a lecture *Why conserve lichens*?. The inaugural paper by Ludwik Lipnicki reviewed the nature of Polish heritage in the development of lichen conservation over the last 80 years. He stressed, among

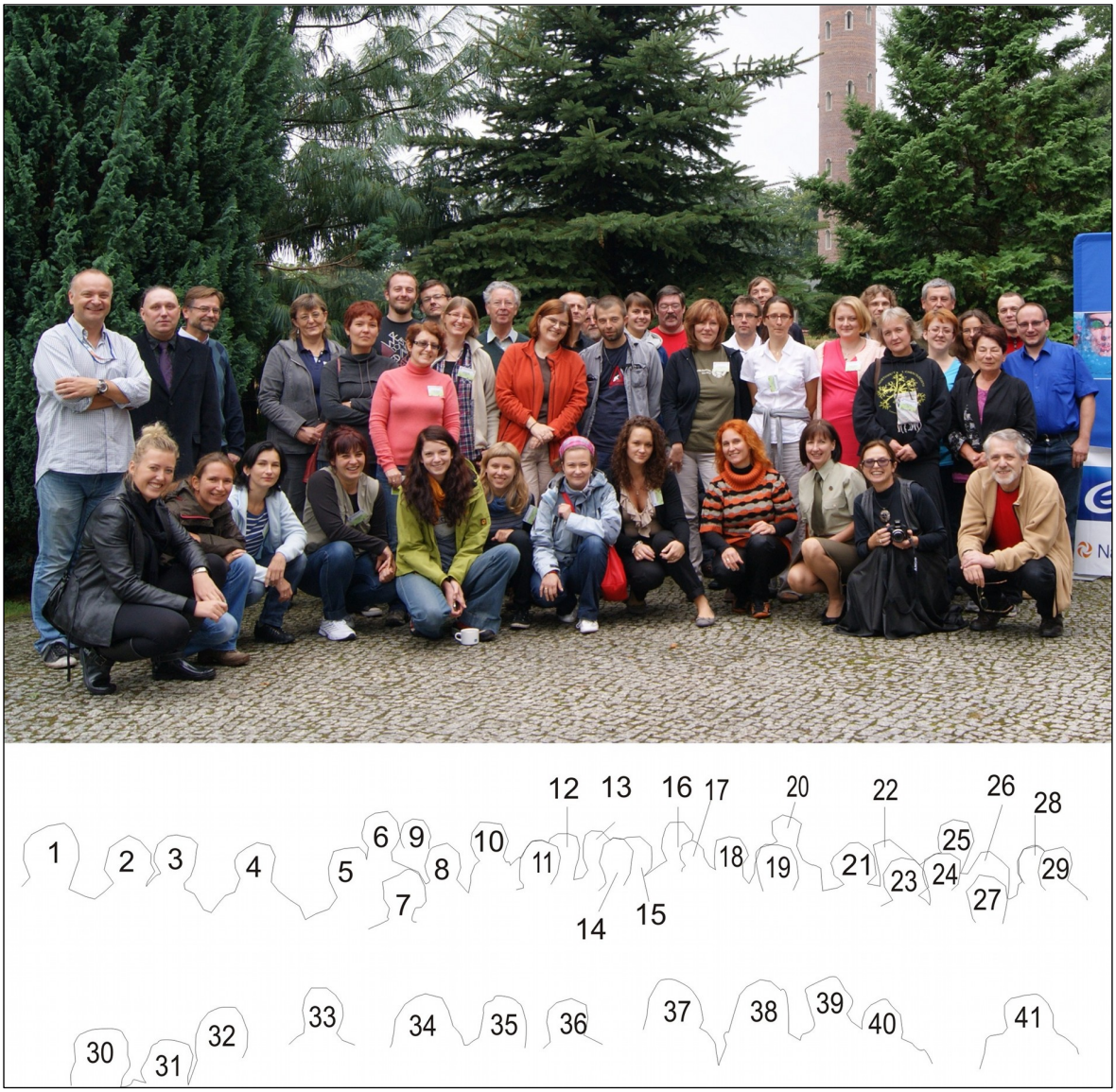


Photo 1. *Conference participants: 1 P. Grochowski, 2 R. Janczar, 3 P. Czarnota, 4 L. Śliwa, 5 V. Konieva, 6 P. Zaniewski, 7 E. Muchnik, 8 K. Wilk, 9 M. Kukwa, 10 M. Seaward, 11 M. Kosowska, 12 D. Kubiak, 13 P. Scholtz, 14 M. Węgrzyn, 15 M. Lisowska, 16 V. John, 17 E. Adamska, 18 E. Hernik, 19 B. Guzow-Krzemińska, 20 V. Otte, 21 A. Zduńczyk, 22 W. Gruszka, 23 E. Farkas, 24 J. Szydłowska, 25 W. Pisarek, 26 A. Kowalewska, 27 U. Bielczyk, 28 R. Szymczyk, 29 M. Hachułka, 30 A. Kulisch, 31 K. Szczepańska, 32 A. Łubek, 33 B. Krzewicka, 34 A. Sadowska-Deś, 35 K. Pietrzykowska, 36 M. Oset, 37 A. Słaby, 38 D. Bielec, 39 I. Mrowińska, 40 H. Wójciak, 41 L. Lipnicki. Photo: P. Mrowiński*

others, the role of Prof. Jozef Motyka in lichen conservation, his views several decades ahead of other lichenologists. In the second part, L. Lipnicki showed the effects of the establishment 20 years ago of reserves concentrating on the conservation of lichens.

The four plenary sessions included 26 presentations concerned with, for example, such topics as: the legal protection of lichens in Hungary (Edit Farkas), facilities for the protection of lichens (Ludwik Lipnicki, Robert Janczar), the state of legally protected lichen sites (Eugenia Muchnik, Anna Łubek, Katarzyna Szczepańska, Paweł Czarnota, Dariusz Kubiak, Mariusz

Photo 2. *A musical evening: participants in good voice to guitar accompaniment. Photo: H. Wojciak*

Hachułka, Agnieszka Kowalewska), and threats to lichens in urban areas (Edyta Adamska, Dominika Bielec). Other topics covered included details of Maria Olech's work in protecting Antarctic lichens (Agnieszka Słaby), the regional list of threatened lichens in the Bieszczady National Park (Robert Kościelniak), epilithic lichen protection problems (Lucyna Śliwa, Beata Krzewicka), the role of mid-forest and mid-field peatbogs as a refuge for rare and protected lichen species (Hanna Wójciak), protection problems for lichens on roadside trees (Wojciech Gruszka), problems relating to the protection of lichens in industrial areas in Poland (Urszula Bielczyk) and in Germany (Peter Scholz), the effects of natural disturbances in forests on the protected status of lichens (Paweł Czarnota), epigeic lichens in *Cladonio-Pinetum* – habitat Natura 2000 (Hanna Wójciak, Piotr Zaniewski) and endangered lichen studies using modern chemical and molecular methods (Martin Kukwa, Beata Guzow-Krzemińska, Anna Zduńczyk).

There were nine contributions to the poster session, namely the protection of threatened lichens: on *Larix* (Volker Otte), in alpine and subalpine belts in Babia Góra massif (Michał Wegrzyn, Maja Lisowska, Agnieszka Słaby), on roadside trees (Rafał Szymczyk, Anna Zalewska, Justyna Szydłowska), and in petroleum and natural gas extraction regions (Ludwik Lipnicki, Piotr Grochowski, Wojciech Gruszka), as well as on genetic variability of photobionts of *Lasallia pustulata* (Anna Sadowska-Deś, Jürgen Otte, Imke Schmitt), on threatened and protected species of the genus *Caloplaca* (Karina Wolf), on the genus *Lyromma*

in Bolivia (Adam Flakus, Edit Farkas), and on threats to lichens on anthropogenic rock substrata in the surroundings of medieval castles in the Sudety Mts (Katarzyna Pietrzykowska).

A very important part of the Conference was a field session co-ordinated by Piotr Grochowski. In addition to participants of the Conference, employees of the Forests Inspectorates responsible for the conservation of nature also took part. Lichenologists could learn about the secondary succession of lichens in areas after fire and in larch plantations, and the foresters had their first opportunity to learn how to recognize common epiphytic lichens (e.g. *Usnea, Bryoria, Cetraria*), and to understand their threats and the ways to protect their habitats. In the reserve 'Mierkowskie Suche Bory', participants observed successional processes involving epigeic lichen on inland dune systems ranging from *Spergulo vernalis-Corynephoretum* by *Cladonio-Pinetum* to *Leucobryo-Pinetum.*

Lasting achievements of the Conference are manifested in three published books: *Lichen Protection – Protected Lichen Species* (345 pages, in English) containing the texts/papers of all presentations, as well as poster abstracts, *Ochrona porostów – Porosty chronione. Materiały konferencyjne* [*Lichen protection – Protected lichen species. Conference Materials*] (121 pages, in Polish and English) containing information on the Conference, and the texts of selected papers and summaries of all the speeches, and *Lichenologia i lichenolodzy w Polsce* [*Lichenology and lichenologists in Poland*] by K. Czyżewska and L. Lipnicki (124 pages + 20 pages of photographs) including the history of lichenological research in Poland, the history and achievements of the Lichenological Section of the Polish Botanical Society, ably supported by a photographic record, and biographies of some Polish lichenologists. One of the panel discussions was devoted to the memory of Prof. Zygmunt Tobolewski. Proposals and demands, based on the content of speeches and discussions, were formulated. The new version of the list of legally protected lichens was also discussed.

Non-scientific issues raised great interest in an exhibition of photographs (with witty annotations) from past meetings of the Lichenological Section. Inherent in meetings of Polish lichenologists are nightly bonfires with communal singing. The memory of the participants will long remain of the first evening, when the approaching storm forced everyone to go into the palace. During the storm, the power supply failed, but this did not deter us, and, held under candlelight, the singing continued to the accompaniment of guitar and intermittent peels of thunder. All in all, this was a most enjoyable and satisfying Conference.

Ludwik Lipnicki and Piotr Grochowski, Poznan

Additional information:

http://www.facebook.com/LichenProtectionInternationalConference

The EGBL-6 meeting in Botucatu, Brazil: a test run for IAL9?

Brazilian lichenology is thriving. The biannual meeting ("Encontro") of the Grupo Brasileiro de Liquenologos (EGBL) bears witness to this. The EGBL-6, organized by Patricia Jungbluth and her crew at the Universidade Estadual Paulista Julio de Mesquita Filho (UNESP) on the Botucatu campus was no exception. While I had previously participated in four meetings of the "Reunião Brasileira de Estudos Liquenológicos" (REBEL), which is a more taxonomy-oriented event including field work, this was my first participation in an EGBL meeting, the Brazilian national lichenological congress, and thus the equivalent to the annual ABLS or BLS meetings.

This year's EGBL brought together over 50 participants from all over Brazil, with most attendees from southern and northeastern Brazil. These days, not many countries would bring together 50 lichenologists in a national meeting, and probably only about half of all Brazilian lichenologists attended this year's EGBL. The excellent contributions spanned everything including taxonomy and inventories, revisionary work, ecology and the use of lichens as bioindicators, and secondary chemistry and biotechnology. The latter is a Brazilian speciality, with internationally reknowned working groups such as Eugênia Pereira and her team at the Universidade Federal de Pernambuco at Recife (collaborating with Iris Pereira in Chile), and Neli Honda and her team at the Universidade Federal de Mato Grosso do Sul, Campo Grande. Another important area in Brazilian lichenology is the use of lichens as bioindicators by means of innovative sampling protocols and data analysis, with Suzana Martins and her team from the Fundação Zoobotânica in Rio Grande do Sul, Porto Alegre at the forefront of these studies.

As a passionate taxonomist, I was most pleased by the many taxonomic and systematic contributions, often combined with ecological aspects, which are now attempting to incorporate molecular methods. The school of Marcelo Marcelli, certainly the "new" father of Brazilian lichenology, has trained an entire generation of highly qualified and talented young lichenologists, including Luciana Canêz, Adriano Spielmann, Michel Benatti, and Patricia Jungbluth, now starting their professional careers. The latest in this "batch" are Bianca da Hora

Photo 1. *Group photograph of the EGBL-6 meeting in Botucatu. Photo: R. Lücking*

and Marcos Kitaura. Marcos presented an extraordinary revision of type specimens in the badly understood and highly diverse genus *Leptogium* and will now commence molecular studies of this genus. For his contributions to Brazilian lichenology and the training of young lichenologists, Marcelo Marcelli received the first *Vainio Award*, recently instated by the GLAL (Grupo Latinoamericano de Liquenólogos) to honour outstanding lichenological careers in Latin America. The award was presented by Adriano Spielmann, Luciana Cañez, and past GLAL president Bibiana Moncada. Certainly well-deserved, Marcelo! And it should perhaps be mentioned that Marcelo himself was mentored by Klaus Kalb, who can now consider a number of young Brazilian lichenologists his academic granddaughters and grandsons.

However, Marcelo's school at the Instituto de Botânica in São Paulo is not the only talent pool in Brazilian lichenology; other outstanding students are coming from Sionara Eliasaro's group at the Universidade Federal de Paraná in Curitiba, such as Manuela Dal Forno, currently working on her PhD thesis on the basidiolichen genus *Dictyonema* at George Mason University under the guidance of James Lawrey. Manuela, who did her Masters with Sionara on Graphidaceae, presented a "fluorescent" lichen night tour developed with the help of James Lawrey, Bibiana Moncada, and José Luis Chaves at Las Cruces Biological Station in Costa Rica. Another talented young lichenologist, Emerson Gumboski, is currently doing his PhD thesis at the Universidade Federal de Rio Grande do Sul with Mara Borges da Silveira, Sionara Eliasaro, and Aline Lemke, on the genus *Ramalina*, including molecular methods. Speaking of talents: while Brazil is certainly paved with these, one of the most promising is Natália Mossmann, working on her PhD thesis in the group of Suzana Martins. We will certainly hear a lot from her in the near future and hopefully her dream to participate in IAL8 in Helsinki becomes a reality.

While Brazilian lichenology has mostly focused on macrolichens and subtropical to temperate taxa in the past, the working group of Marcela Cáceres at the Universidade Federal de Sergipe in Itabaiana has opened a strong programme to explore microlichen diversity and ecology in the tropical parts of Amazonian and northeastern Brazil, and the number of contributions by this group at meetings is impressive. Several thesis works have been completed or are under way that either focus on taxonomic inventories of selected regions or perform ecological studies of lichens particularly in the dry and highly threatenend Caatinga region of Brazil, as part of a long term research program at this university.

The meeting also had a few international guests, besides myself, André Aptroot, Iris Pereira (Chile), and Bibiana Moncada (Colombia). Bibiana recently concluded her PhD thesis on the genus *Sticta* in Colombia and presented part of her work, including a large molecular analysis using the ITS barcoding gene, which showed that names such as *S. fuliginosa* and *S. weigelii* represent many different species and that only few, if any species in this genus have a wide distribution.

The EGBL-6 meeting was not only theoretical but also offered workshops, including a several day long pre-congress workshop on lichen taxonomy offered by Marcelo Marcelli and a workshop on pyrenocarpous lichens by André Aptroot and Marcela Cáceres, who together with Manuela Dal Forno also demonstrated the method of preserving DNA samples with FTA cards, plus a workshop on phylogenetic methods by Bibiana Moncada and myself, and a workshop on biotechnology with lichens by Eugênia Pereira and Maira de Lourdes Buril.

Photo 2 *(upper). Workshop on pyrenocarpous lichens organized by André Aptroot and Marcela Cáceres, with André and Manuela Dal Forno demonstrating the use of FTA cards for DNA extraction.* ***Photo 3*** *(lower). Manuela Dal Forno, Marcela Cáceres, Lourdes Buril, and Alice Gerlach discussing during the poster session. Photos: R. Lücking.*

Photo 4 *(upper). The organizing committee of the EGBL-6 meeting: Taluana Destro de Almeida, Bianca da Hora, Patricia Jungbluth, and Camila Zanetti.* ***Photo 5*** *(lower). GLAL Vainio Awardee Marcelo Marcelli, Bibiana Moncada, and Eugênia Pereira at the closing dinner. Photos: R. Lücking.*

Overall, the meeting was very well organized by Patricia Jungbluth and her team, from the accommodation, to the daily transport to and from the meeting venue on the university campus, to the variety of lunch places with a great food selection, to the sightseeing tour including a historic coffee processing factory. I especially enjoyed the water polo competition, where a mixed North American-German-Colombian-Brazilian team managed to draw a multiscoring tie against a strong Brazilian National Team. Having now experienced for myself on several occasions that the Brazilians are excellent organizers, it seems they are now ready to host a larger event – and, dare I suggest, what better opportunity can there be than the IAL9 in 2020?

Robert Lücking, Field Museum, Chicago

PERSONALIA

Niall Higgins defended his PhD thesis *Physiological ecology of lichens: Factors influencing the distribution and diversity of maritime communities* on 15 February 2011 at School of Natural Sciences National, University of Ireland.

Lluís Fiol (Universidad de las Illes Balears) defended his PhD thesis *Líquenes saxícolas calcícoles de Mallorca i Cabera. Control biològic del proces de meteorització de los roques calcárias* [*Saxicolous calcicolous lichens of Mallorca and Cabrera. Biological control of weathering processes by calcicolous lichens*] on 29 July 2011.

James C. Lendemer (New York Botanical Garden) defended his doctoral thesis *Lichen taxonomy for the 21st century: A revision of the genus* Lepraria *S. L. in North America north of Mexico* in January 2012.

Basil Britto Xavier defended his PhD thesis *Organelle genomes of lichens* at the University of Iceland on 6 February 2012.

Fride Høistad Schei defended her thesis on *Spatial patterns of epiphytic lichens at local and regional scale: The influence of deterministic and stochastic processes* on 2 March 2012 at University of Bergen (Norway).

Sandrina Azevedo Rodrigues defended her doctoral thesis *Biodiversidade liquénica e biomonitorização de poluição atmosférica* [*Lichen biodiversity and biomonitoring of atmospheric pollution*] on 6 March 2012 at Universidade de Aveiro (Portugal).

Samantha Fernández Brime defended her PhD thesis *Els líquenes saxícoles i terrícoles del Parc Natural de Cap de Creus, amb un estudi filogenetic aplicat a la sistematica dels generes Diploschistes and Ingvardiella* [*Saxicolous and terricolous lichens of the Parc Natural de Cap de Creus, with a phylogenetic study applied to the genera* Diploschistes *and* Ingvardiella] at Universidad de Barcelona on 30 March 2012.

Raquel Pino Bodas (Universidad Complutense de Madrid) defended her PhD thesis *Delimitación de especies del género* Cladonia*: revisión y evaluación de especies conflictivas* [*Species delimitation in the genus* Cladonia*: revision and evaluation of conflictive species*] on 29 June 2012.

Victor Johansson defended his PhD thesis *Distribution and persistence of epiphyte metapopulations in dynamic landscapes* at Swedish University of Agricultural Sciences, Uppsala in 2012.

Håkan Lättman, Linköping University (Sweden) defended his doctoral thesis *Studies on spatial and temporal distributions of epiphytic lichens* on 22 October 2012.

Ulla Kaasalainen, Helsinki University (Finland) defended her doctoral thesis *Cyanobacteria and their toxins in lichen symbiosis* on 2 November 2012.

Guillermo Amo de Paz at the Universidad Complutense de Madrid defended his PhD thesis *Estudios filogenéticos y evolutivos sobre* Xanthoparmelia *y géneros relacionados (Parmeliaceae, Ascomycota)* [*Phylogenetic and evolutive studies on* Xanthoparmelia *and related genera (Parmeliaceae, Ascomycota)*] on 2 December 2012.

Mercedes Vivas Rebuelta at the Universidad Complutense de Madrid defended her doctoral thesis *Adaptación y tolerancia de los líquenes a condiciones adversas a través de gradientes ambientales* [*Adaptation and tolerance of lichens to adverse conditions along environmental gradients*] on 4 December 2012.

Zuzana Ferencova at the Universidad Complutense de Madrid defended her PhD thesis *Estudio morfológico comparado de los caracteres generativos en relación con linajes monofiléticos de la familia Parmeliaceae (Lecanorales, Ascomycota)* [*Comparative morphological study of generative characters in relation with monophyletic lineages in the family Parmeliaceae (Lecanorales, Ascomycota)*] on 5 December 2012.

BOOK REVIEWS

APTROOT, A., HERK, K. van & SPARRIUS, L. (2011): Korstmossen van duin, heide en stuifzand. – Bryologische en Lichenologische Werkgroep van de KNNV (NUR 412). Without place. 158 pages. Hard back. ISBN 9789081149501. Price: 24.95 €

This little guide to the "Lichens of dunes, heathlands and drift sands" (title) is a nicely illustrated photographic guide to the macrolichens of those habitats. It contains 66 species mainly from the genera *Cladonia* (40), *Peltigera* (9), *Collema* and *Leptogium* (both with 3 species), *Cetraria* and *Stereocaulon* (2 species each) and single examples of seven other genera. From these figures it is clear that most of the macrolichens in the Netherlands occurring in these habitats, but only selected examples of microlichens are covered. All species included are fully described and illustrated by several photographs (up to seven for *Cladonia ramulosa*) on one or mostly two pages, and their distributions within the country are illustrated by a grid map. Sometimes, especially for all of the *Cladonia* species, very accurate drawings are presented in addition to the photographs. Keys for the *Cladonia* and *Peltigera*

species are also provided. Interestingly, a list of 22 macrolichens which are extinct (since 1800) from those habitats is included.

Undoubtedly the value of this book lies in its superb illustrations and can therefore be recommended to all those working with lichens in these habitats. The Dutch language will not be too difficult to master for users with good knowledge of English or German. The number of additional macrolichens in these habitats in lowland Western and Central Europe outside the Netherlands is rather small. The only shortcoming of this guide for me is the omission of certain common microlichens (e.g. in *Placynthiella* or *Trapeliopsis*).

Peter Scholz, Schkeuditz

ATANASSOVA, A. & MAYRHOFER, H. (2012): Physciaceae. Part 1. Foliose genera. – Fungi of Bulgaria Vol. 9., 112 pages, 52 colour photos, 25 b/w distribution maps. Institute of Biodiversity & Ecosystem Research, Bulgarian Academy of Sciences. Paperback ISBN-13: 9789549746242. Price: 68 €

The series *Fungi of Bulgaria* has now reached volume 9 in which the foliose (and subfruticose) genera of the lichenized fungal family Physciaceae are treated. The seven treated genera are provided with descriptions and keys. Each species has a detailed description of morphology, chemistry, ecology and distribution, and a short discussion, accompanied by illustrations and distribution maps is provided at the end of the book. There are also lists of references and names, and a list of lichens on various substrata.

It is an impressive piece of work which deserves to be noticed and appreciated, but, there are some details that have to be questioned. Apparently TLC has been used for identification of secondary substances (since zeorin has been reported for some species), but this is not mentioned in *Material and Methods*. In the key to the genera, *Physcia* is said to have a black lower surface but none of the treated species have this. In the same key, the filiform pycnoconidia should have been mentioned for *Hyperphyscia* as it separates all the other genera. Furthermore, the key characters for separating *Phaeophyscia* and *Physciella* are not convincing, and with these characters *Phaeophyscia poeltii* and *P. insignis* (not treated) could be included in *Physciella*. *Anaptychia* is difficult when it comes to the two species *A. crinalis* and *A. setifera*; it is not reliable to separate them by the lobe-width, since with this character, it is hardly possible to separate them from tiny *A. ciliaris*. Even though the reference list is extensive, one reference is missing for *Heterodermia* as it is treated on a European basis in *Bibliotheca Lichenologica* 88: 453–463 (2004). *Phaeophyscia* should have included *Physciella* (see above) as the character used is not reliable if compared with other genera in the family. The lower cortex is not a suitable character to use at the generic level as it varies in many genera (e.g. *Physcia*). *Phaeophyscia pusilloides* is not correctly used. Nothing in the Mereschkowsky's description (as *Physcia pusilla*) indicates that the soralia are capitate and the material determined by Mereschkowsky, including the type material (Mereschkovsky, Lich. Ticin. Exs. 65), shows capitate soralia. It falls within the variation of *Phaeophyscia orbicularis*, and so does the illustration in this book. In the genus *Physcia*, the treatment of *P. aipolioides* is confusing. Nádvorník treated it as a variety of *P. biziana* and

regarded it as a taxon with K– medulla. Material determined by him does not oppose that, which means that zeorin is missing. The treatment here is evidently due to misidentifications.

Almost all species are presented with photographs which are, with few exceptions, of high quality showing the characteristics of the species. The references to them and the maps should have been placed just before the descriptions and not randomly in the text. Unfortunately, illustrations of some problematic species are missing e.g. *Anaptychia crinalis* and *Physcia aipolioides*. Several species have only a few records and are thus not mapped but for 25 of the 42 treated species, distribution maps are presented.

The authors are to be congratulated to a very valuable contribution to our knowledge of the Physciaceae in the southeastern part of Europe and it will hopefully inspire further work on this group. We also look forward to see a similar treatment of the crustose Physciaceae in the same series as one of the authors is a well-known specialist in this group.

Roland Moberg, Uppsala

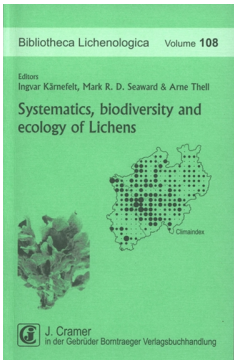
KÄRNEFELT, I., SCHOLZ, P., SEAWARD, M.R.D. & THELL, A. (2012): Lichenology in Germany: past, present and future. – Schlechtendalia 23: 1–90. Institut für Biologie, Institutsbereich Geobotanik und Botanischer Garten der Martin-Luther-Universität Halle-Wittenberg, Halle/Saale, Germany. Paperback. ISSN 1436-2317. Available from: *uwe.braun@botanik.uni-halle.de* or *regine.stordeur@botanik.uni-halle.de*. Free download: *http://www.lichenology.org/PDFs/Kaernefelt&al2012_LichenologyInGermany.pdf*

This is an extremely nice little book, which presents a cavalcade of 104 German lichenologists in English. It means short biographies of all those who are regarded to have played key roles in the deveplopment of German lichenology. From Georg Franz Hoffmann (1760–1826) to our contempories such as Matthias Schultz (1972–). There is a photograph of each scientist and a selection of their publications. Those fortunate people who happen to have Vitus Grummann's *Biographisch-bibliographisches Handbuch der Lichenologie* (1974) available and who can read German can naturally find more information on numerous persons, but naturally not for the younger generations – and, of course, we can often find more information by simply googling in the internet; in many cases I found less information or almost nothing at all in that way, so I welcome the booklet as a fast source for useful knowledge on the persons whose papers I am reading.

An astonishing number of distinguished German lichenologists are included, such as G.F. Hoffmann, F. Arnold, W. Körber, L. Rabenhorst, W. Zopf, S. Huneck, A. Henssen, H. Hertel, O. Lange, J. Poelt, V. Wirth, R. Lücking, T. Lumbsch and C. Printzen. Not all those Germans who have published on lichens are listed, and I might have added a few, but the selection is highly representative. I enjoyed the not too serious style of presentation, which usually gives the essential facts, however. The three non-German authors and Peter Scholz are to be thanked for the enjoyable book, which should be especially interesting for the younger generations.

Teuvo Ahti, Helsinki

KÄRNEFELT, I., SEAWARD, M.R.D. & THELL, A. (eds.)(2012): Systematics, biodiversity and ecology of lichens. – Bibliotheca Lichenologica 108. – J. Cramer in Gebr. Borntraeger Verlagsbuchhandlung, Berlin & Stuttgart. ix + 290 pages. Paperback. ISBN 978-3-443-58087-2, ISSN 1436-1698. Price: 87.00 €



The most recent volume of *Bibliotheca Lichenologica* is dedicated to Hans-Martin Jahns, former head of the Institute of Botany at the University of Düsseldorf and well-known co-author (with Aino Henssen) of *Lichenes – eine Einführung in die Flechtenkunde*. Thirty eight authors from 11 countries have contributed 17 papers on a wide variety of aspects in lichenology as the title of the volume suggests. This also reflects the broad interest in lichenology of Jahns, who also served as President of the *International Association for Lichenology* (IAL) from 1996 to 2000. Consequently the volume starts not only with the usual dedications by the editors and his former pupils and colleagues from Düsseldorf, but also with a historical paper on all the former nine presidents of the IAL by L. Arvidsson (p. 1–20).

As is usual with such collections of papers, it is difficult to select a few for a detailed review. The paper of greater taxonomic importance is that on *Molecular phylogeny of xanthorioid lichens* ..., with notes on their morphology by N.M. Fedorenko, S. Stenroos, A. Thell, I. Kärnefelt, J.A. Elix, J.-S. Hur and S.Y. Kondratyuk (p. 45–64). Based on molecular analyses of nuclear ITS and 18S and mitochondrial 12 mtSSU and 23 mtSSU, five new monophyletic groups had been found and are described as new genera *Gallowayella*, *Jesmurraya*, *Honeggeria*, *Massjukiella* and *Martinjahnsia*. Twenty six new combinations in these new genera are proposed and a key to the genera (now 15) of xanthorioid lichens based on morphological characters is provided. The widespread holarctic species of the *Xanthoria candelaria*-group and *X. polycarpa* are now transferred to *Massjukiella*.

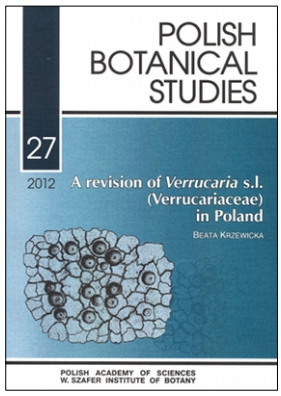
The largest contribution of the volume is a literature review of *Arthonia* s. lat. by R. Sundin, G. Thor and A. Frisch (p. 257–290). This paper discusses the various attempts to split the large and heterogenous genus *Arthonia* based on morphological characters; these often date back into the 19th century and provide many names available for natural segregates when more molecular data is available. A key for eight segregates of *Arthonia* s. lat. and *Arthothelium* s. lat. (first established by R. Sundin & A. Tehler in 1998) is also provided.

More new species are described in various other papers in the volume within the genera *Caloplaca* (*C. magellanica* Søchting & Sancho from southernmost Chile), *Collema* (*C. paramense* P.M. Jørg. & Palice from Ecuador) and *Rinodina* (*R. candidogrisea* Hafellner, Muggia & Obermayer from the Alps).

All chapters are written in English with the exception of the paper by N. Stapper on lichens on trees in the city of Düsseldorf under the influences of air pollution, local climate and climate change (p. 221–240) and the one page dedication by his pupils which are understandably in German, being written by German authors for a mostly German audience.

Peter Scholz, Schkeuditz

KRZEWICKA, B. (2012): A revision of Verrucaria s. l. (Verrucariaceae) in Poland. – Polish Botanical Studies 27. Polish Academy of Sciences. W. Szafer Institute of Botany. 143 pages. ISSN 0867-0730. ISBN 978-83-62975-06-8. Price: 29.00 €



This is an impressive traditional monograph, including *Verrucaria* and genera recently segregated from it (*Bagliettoa*, *Hydropunctaria*, *Parabagliettoa*, *Placopyrenium*, *Verrucula*, *Verruculopsis*). The number of species accepted (62) is less than half those of the previous treatment (Nowak and Tobolewski (1975) *Porosty Polskie*). The detailed descriptions of species include morphology, anatomy, ecology, known distribution, synonymy and citations of type specimens. Some rarely used characters have been found to be useful in species delimitations. No molecular data are presented. Each species is illustrated by excellent (although small) colour photos (1–4 per species). The historical background to studies of *Verrucaria* in Poland, as well as the general systematic background concerning classification of *Verrucariaceae* are presented. A useful glossary explaining terminology of morphological characters used is also provided.

A lot of hard work has been done: altogether c. 1700 specimens have been studied, including type specimens of 36 accepted species, a high proportion as many types have not been available or are missing. Two new combinations (*Parabagliettoa disjuncta* (Arnold) Krzewicka and *Verruculopsis minutum* (Hepp) Krzewicka) are introduced. Many taxa have been synonymized, but in several cases this is not validly augmented, and may prove to be premature. Three species are reported for the first time from Poland. The accepted species seem to be well separated from each other by morphological characters. Keys for genera and species have been carefully prepared and are mostly easy to use. Descriptions of several species differ in some characters from other recent studies. In several cases this is commented upon (mainly aquatic species), but in others not (mainly terrestrial species). Differences in the morphology of *Verrucaria* species between different studies (usually different countries) are typical, but reasons for this await clarification. One of the main challenges in identifying *Verrucaria* species is that many specimens do not fit with the species reported from a region or described in the literature from elsewhere. I suspect that this is also the case in Poland. However, nothing is said about the unidentified material.

Even if the taxonomic conclusions differ, the present work largely rests on the previous work of J. Nowak who collected c. 80% of all Polish *Verrucaria* s. lato specimens. This is an impressive number compared to most other regions, but several species rare in Poland may never have been collected. This latest work is not only a major step forward in the taxonomy of *Verrucaria* in Poland, but useful to all lichenologists identifying pyrenocarpous lichens. However, the taxonomy of *Verrucaria* s. lato is very far from settled, and major changes in species delimitations and numbers are to be expected, particularly when DNA sequences are involved.

Juha Pykälä, Helsinki

RICO, V.J. & BARRASA, J.M. (2011): Basidiomycota liquenizados y lichenícolas. Agaricales: Hygrophoraceae: Arrhenia y Lichenomphalina; Cantharellales: Clavulinaceae: Multiclavula; Hydnaceae: Burgoa. – Flora Liquenológica Ibérica 9. – Madrid: Sociedad Española de Liquenología (SEL). Paperback, 48 pages. ISSN 1696-0513. Price: 10.00 €

Part 9 of the well established lichen flora of the Iberian Peninsula is a treatment of the lichenized and some lichenicolous basidiomycetes occurring there. As the title page specifies, the treated fungi are from the Agaricales and Cantharellales, so the lichenicolous heterobasidiomycetes are not treated. All in all only eight species are remaining now for this issue. They are fully described and all of them are illustrated by good and instructive colour photographs. Most of the species are very rare or at least very rarely recognized in the Iberian Peninsula. Only the four species of *Lichenomphalia* are known from several regions of the area. *Arrhenia peltigerina* (Peck) Redhead, et al. is only known from two localities, and the recently described *Burgoa angulosa* Diederich, Lawrey & Etayo is still, within the study area, only known from the type collection. In addition to the usual keys, descriptions etc., this issue also contains a detailed 7-page glossary which includes a decent number of ecological terms. Hopefully this treatment will stimulate a broader awareness for the lichenized and lichenicolous basidiomycete fungi of Spain and Portugal.

Peter Scholz, Schkeuditz

SKIRINA, I.F., KOŽENKOVA, S.I. & RODINKOVA, I.M. (2010): Epifitnye lišainiki Primorskogo kraja i ispol'zovanie ih v ekologitseskom monitoringe. [Epiphytic lichens of Primorsky kray and their application in ecological monitoring]. – Vladivostok: Dal'nauka. Soft cover. 134 pages. ISBN 9785904411115. Price: unknown

This attractive new booklet is mainly aimed at non-lichenologists as an introduction to lichens and their possibile use for biological monitoring in the Far East of Russia. It consists of three rather different parts. The first chapter (p. 7–37) is a general introduction to lichens, including their morphology, systematics and ecology with a lot of explanation of the various technical terms. The second chapter (p. 38–77) called "lichen indication" explains different methods used in biomonitoring with lichens in general, but also with selected examples where these methods had been used in the Far East, especially in the vicinity of Vladivostok. Some of the investigations had already started 35 years ago and have been repeated at 10-years-intervals. With these examples and their own experiences in lichen biomonitoring, the authors clearly demonstrate the potentials for lichen bioindication in that region. The third chapter (p. 78–117) deals with the epiphytic lichens of the Primorsky Region and includes keys to the species; however, it would appear that the macrolichens are much better covered than the microlichens. Finally the volume has 16 plates of four colour photographs each representing a good selection of typical far eastern epiphytes. The paper and printing quality is high, and overall it should be favourably received by those in the Far East interested in lichens.

Peter Scholz, Schkeuditz

VUST, M. (2011): Les lichens terricoles de Suisse. – Mémoire de la Société vaudoise des Sciences naturelles 24. – Lausanne: Société vaudoise des Sciences naturelles. 352 pages. Paperback. ISSN 00379611. Price: 56.00 €

This monograph of the terricolous lichens of Switzerland is the result of a specifically designed inventory of Switzerland. Therefore the Swiss territory was divided into 31 units of "vegetal landscapes". For each of these units ten randomly selected sampling sites had been investigated with the aim of registering all terricolous lichens. In addition, randomly selected 310 square kilometers (nearly 7000 preferential spots) have been searched with the aim to finding data on terricolous species.

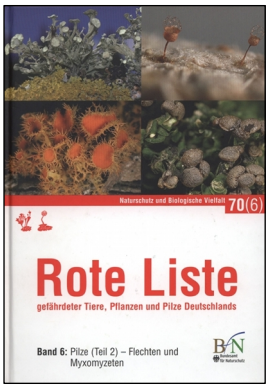
The book is divided into five main parts. The first (p. 11–48) deals, after the necessary introduction, with methods and general results. The largest part (p. 49–210) on species and their distribution covers 189 species surveyed by these methods. For each species, the ecology and distribution is commented upon, with lists of the Swiss cantons in which they occur, usually accompanied by a distribution map. Based on the ecological data collected, the maps also include the potential areas of occurrence in Switzerland. Many species are also illustrated by instructive colour photographs and the red data list status is given. In the third part (p. 211–258), the ecological requirements of the terricolous lichens are discussed and in the fourth part (p. 259–300), the status of the terricolous lichens in various vegetation types and units of the area is discussed in detail. In the final fifth part (p. 301–338), a more general discussion including some perspectives is presented. This is followed by the references and an index.

The present work is the fruition of on-going work based on a project accepted as a thesis by the University of Geneva in 2002. It is a fine example of how basic floristic fieldwork can be imbedded in high level biodiversity research. The author and Swiss lichenologists in general can be congratulated on this major step forward in lichenological knowledge of the ecological requirements and status of Swiss lichens.

Peter Scholz, Schkeuditz

WIRTH, V., HAUCK, M., BRACKEL, W. von, CEZANNE, R., BRUYN, U. de, DÜRHAMMER, O., EICHLER, M., GNÜCHTEL, A., JOHN, V., LITTERSKI, B., OTTE, V., SCHIEFELBEIN, U., SCHOLZ, P., SCHULTZ, M., STORDEUR, R., FEUERER, T. & HEINRICH, D. (2011): Rote Liste und Artenverzeichnis der Flechten und flechtenbewohnenden Pilze Deutschlands. [In German], pages 7–122. In: Ludwig, G. & Matzke-Hajek, G. (eds.): Rote Liste gefährdeter Tiere, Pflanzen und Pilze Deutschlands. Band 6: Pilze (Teil 2) – Flechten und Myxomyzeten. – Bundesamt für Naturschutz, Bonn-Bad Godesberg. 240 pp. ISBN 978-3-7843-5188-9. Price: 29.95 €. Available from: Landwirtschaftsverlag GmbH, D-48084 Münster. E-mail: *service@lv.de*

This volume combines red lists for both lichens and myxomycetes, but my review refers only the lichen section. The main body is a revised and updated list of all lichens and lichenicolous fungi known from Germany. It includes 1946 species of lichens, 390 lichenicolous fungi and 44 "lichen-like" fungi. This is an increase of 616 since 1996 published list. For each species are indicated, as far as known: red list criteria; current frequency; long term change in frequency; recent change in frequency; presence of current threats; kinds of threat in ten



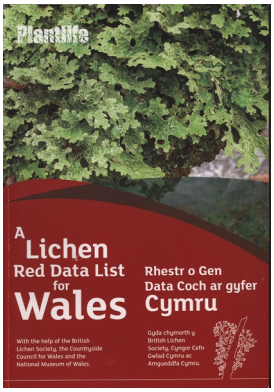
categories; red list category in 1996; type of change in category (positive/negative); a column to indicate neophytes is left empty.

The list is preceded by introductory sections on lichens and on the criteria for the evaluation of the red list status. It is followed by one page with comments on 17 species, an evaluation of the figures, and a discussion of the threatening factors. Added are: a 3-page list of references, mainly dealing with aspects of the threatening; a list of "synonyms", changed names from the 1996 red list with present name, maybe taxonomic synonym, maybe re-identification; lists of names with further types of change, some last-minute changes which are missing from the main list, and a few nice colour photographs of five species treated in detail in the introduction.

Red lists are produced so frequently these days that it is not feasible to present all in the *IAL Newsletter*, but this one merits an exception, since it concerns one of the most intensely explored regions of the world, where the changes in the biodiversity are perhaps better documented than anywhere else. This makes the data on the biodiversity dynamics exemplary and of interest throughout Europe and beyond. The work is also particularly useful because it presents a considerably updated current list of all species of Germany, based on the latest results of explorations in various parts of the country and following the latest taxonomic opinions. One error was noted in the five example species: *Cladonia rangiformis* Hoffm. is erroneously assigned a worldwide distribution, although recent investigations indicate that it is only in Europe, North Africa, Macaronesia and SW Asia (see Litterski & Ahti 2004); in Brandenburg this species is often seen colonizing recent habitats (road banks, abandoned land). Otherwise the team of collaborators is a guarantee for the highest possible quality of the data.

Harrie Sipman, Berlin

WOODS, R.G. (2010): A Lichen Red Data List for Wales. – Salisbury & Bangor: Plantlife & Plandlife Cymru. 68 pages. Softback. ISBN 9781907141409. Free download: *http://www.-plantlife.org.uk/publications/a_lichen_red_data_list_for_wales/*



Wales is certainly one of the hot spots of lichen diversity in Europe taking into consideration the restricted size (11% of the United Kingdom) and the high number of lichens occurring there from coastal dunes to high mountains with diverse geology under an Atlantic climate.

This output of the joined efforts of many amateurs and professionals of the British Lichen Society, the National Museum of Wales, the Countryside Council of Wales and especially the author is not only the first Red Data List of the lichens of Wales but also the most recent checklist of the lichens and allied fungi of this important part of the British Isles.

The list comprises c. 1316 taxa (1250 species) of which 22 are *Extinct*, 28 *Critically endangered*, 24 *Endangered*, 156 *Vulnerable*, 131 *Near threatened* and 152 *Data deficient*. All taxa

are listed in a table which not only provides the red list status in Wales and in the U.K. but also criteria on which the Welsh evaluation has been based, information on rarity, national and international responsibility, edge of British range in Wales, proportion of British population as well as information on species included in the British Biodiversity Action Plan, and the schedules of the *Wildlife and Countryside Act*. Differences in the evaluation of results in Britain and in Wales are discussed, not only in terms of nature and lichen conservation, but also for plant geography, the chapter on *Taxa reaching the edge of their range in Wales* being of particular interest.

Finally it should be mentioned that this list has much more to offer than one would expect from the title and that it is certainly of great interest for many more people than those working directly with nature conservancy in Wales, particularly in its methodological approach.

Peter Scholz, Schkeuditz

OBITUARIES

Dharni Dhar Awasthi

28 September 1922 – 21 August 2011

Dr Dharni Dhar Awasthi, India's leading lichenologist for more than seven decades, passed away on August 21, 2011 in Lucknow, Uttar Pradesh. Dr Awasthi, the father of Indian lichenology, was born on the auspicious Durga Asthami the 28 September 1922 as second son of Pandit shri Hari Ballabh and Mrs Chandra Devi Awasthi in the village Naret, Patti-Askote, district Pithoragarh of Uttarakhand. Dr Awasthi received his primary education in village Naret and Askote after that did high school from Pithoragarh and Intermediate from Almora district.

Dr Awasthi srudied for his BSc and MSc (Botany) in 1943 and 1945 respectively from Lucknow University. He joined the Department of Botany there as Research Assistant (1945–1946), before working in a stipendiary training programme in Systematic Botany and Taxonomy (1946–1948) at the Botanical Garden and Herbarium, Calcutta (Kolkata), under the auspices of Botanical Survey of India. During this period he became interested in the taxonomy of Indian lichens which he pursued throughout his later life. He returned to Lucknow as a

Botanical Assistant (1948–1952) at the National Botanical Garden (CSIR- National Botanical Research Institute, Lucknow), which was then under the Department of Agriculture, Uttar Pradesh. During this period he extensively explored the difficult and remote areas of the Himalayas and collected both angiosperms and lichens; these collections are presently preserved in CSIR-National Botanical Research Institute, Lucknow herbarium and provide useful data for carrying out climate change studies in the area. He travelled for months in difficult terrains of the Himalayas for plant explorations, much of it on foot as no vehicular transport was available.

Dr Awasthi then joined the Department of Botany, Lucknow University as Lecturer (1952–1971) being promoted to Reader (1971–1983); after superannuation he worked as an Emeritus Scientist of CSIR in the same Department (1984–1987).

As a faculty member at the University of Lucknow, Dr Awasthi, initiated work in 1952 on Indian lichens, obtaining his PhD (Botany) from there under the guidance of Prof. S.N. Das Gupta in 1961. From 1960 to 1963 he worked as a Fulbright Alumnus of the National Science Foundation USA for advanced training in lichenology under Prof. William A. Weber at the University of Colorado, from where he earned another PhD. During his time as a Fulbright Alumnus Fellow, he visited many of the European herbaria and gathered a huge number of exsiccate specimens which helped him considerably in the future for authentic identification of Indian lichens. Currently, all of his personal herbarium specimens (herb.-AWAS) and those of the Lucknow University herbarium (LWU) are on a permanent loan to CSIR-National Botanical Research Institute herbarium, Lucknow (LWG). Prof. W.A. Weber and Prof. Hugo G. Rodeck in Colorado, Prof. O.A. Hoeg in Oslo, and many more European lichenologists helped Dr Awasthi to obtain the rare literature on lichens which enabled him to carry forward the lichenological studies in India. Consequently, Dr Awasthi was able to establish a personal library comprised of both rare and ancient updated literature on lichens.

After rejoining the University of Lucknow in 1963, Dr Awasthi vigorously pursued taxonomic investigations on Indian lichens. He explored almost all the phytogeographical regions of the country for the collection of lichens, as well as some of the lichen rich sites in neighbouring Nepal. This vast research work enabled him to publish his important *Catalogue of the lichens from India, Nepal, Pakistan and Ceylon* in 1965, and through his worldwide studies the monograph on the lichen genus *Dirinaria* in 1975. Later works included *Keys to the macrolichens and microlichens of India, Nepal and Sri Lanka* (1988, 1991), *A Handbook of lichens* (2000) and a *Compendium of the macrolichens from India, Nepal and Sri Lanka* (2007). A comprehensive list of his publications is provided in the British Lichen Society Bulletin 110: 175–178 (2012).

The foremost centre of lichenology in India that started functioning in the 1950s in the Botany Department at Lucknow University under the guidance of Dr Awasthi, created a school of his own and a number of workers associated with him. His first PhD scholar, M.R. Agarwal, studied the lichens of Darjeeling district, West Bengal, in Eastern Himalayas. K.P. Singh, who later initiated lichenological research in different regional centres of the Botanical Survey of India, extensively explored the Western Ghats with Dr Awasthi, completing his PhD on the lichens of Western Ghats. Subsequently, P. Akhtar, M. Joshi, S.R. Singh, Ajay Singh, Lok Raj Sharma, D.K. Upreti and Preeti Srivastava completed their doctorates on revisionary studies of various lichen taxa of India.

Dr Awasthi solely or jointly revised more than 70 genera of lichens and described more than 75 species new to science. He worked for over 35 years under various research projects financially supported by CSIR, UGC, State Council of Science and Technology, Lucknow and the Botanical Survey of India. Financial support through various Government agencies enabled him to establish his centre and herbarium at Lucknow.

For his outstanding contribution to Indian lichenology, Dr Awasthi gave the Prof. P. Maheshwari Memorial Lecture of INSA in 1991, was elected a Fellow of Indian Academy of Sciences, Bangalore in 1978 and a Fellow of the Indian National Science Academy, New Delhi in 1984. His distinguished services were also recognized by International Association for Lichenology who honoured him with the prestigious *Acharius Medal* in 1992. He was also elected an Honorary Member of the British Lichen Society in 1993, and has often been referred to as the Father of Indian Lichenology. Some of the lichen genera and species named in his honour are *Awasthiella indica* Kr.P Singh, *Awasthia melanotricha* (D.D. Awasthi) Essl., *Anaptychia awasthii* Kurok., *Anthracothecium awasthii* Ajai Singh, *Arthothelium awasthiii* Patw. & Makhija, *Bottaria awasthii* Makhija & Patw., *Cryptothecia awasthii* Makhija & Patw. and *Lobaria awasthiana* (Räsänen) D.D. Awasthi.

The author had an opportunity to work closely with Dr Awasthi from 1979 until his death, and found him to be a great mentor, a person with uncompromising ethics, compassion, commitment to duty, national pride and a *par excellence* human being. Dr Awasthi contributed immensely to the growth of lichenology in India and paved the way for future research on this rare and unique branch of botany. No one can write a research paper on Indian lichens without referring him.

D.K. Upreti, Senior Principal Scientist, Lichenology Laboratory, CSIR-NBRI, Lucknow

Taimi Piin-Aaspõllu

3 September 1940 – 2 september 2012

Taimi Piin-Aaspõllu graduated from the Biology Department of Tartu State University in 1964. At that time, the faculty professors included numerous renowned botanists who undoubtedly influenced the career choices of many students, who were, for example, encouraged to undertake research during their first years of studies. Thus Taimi took active part in expeditions to study the plant cover in Karaganda District, Kazakhstan. Having taken a serious interest in lichens, she had already before the graduation became a specialist of the genus *Pertusaria* which also constituted the subject of her diploma thesis. Research, indeed, took her for several years to the Kola Peninsula where she worked at the Polar-Alpine Botanical Garden until 1966. Following fieldwork on the Kola Peninsula, Taimi returned to the University of Tartu where she developed a significant lichen herbarium and participated in the teaching in the Department of Botany. Her work included research on species difficult to define, the management of collections and the supervision of student theses. In 1975 she was forced to make a career move, taking up a new, long-term job at the Tallinn Botanical Garden. Her extensive experience in fieldwork and the development of the herbarium proved pertinent to her new position and for years was the curator of the considerable plant collections of the Botanical Garden. Nordic areas continued to have an appeal to Taimi and she undertook several

Taimi Piin exploring lichens in the small town of Pärnu (Estonia), 2008. Photo: S. Liiv

expeditions to Taymyr and Chukotka. In cooperation with the geobotanist Nadezhda Matveyeva and the soil microbiologist Olga Parinkina she conducted successful studies on the primary succession of terricolous lichens and tundra species on soil microbiocoenosis. The distribution of terricolous lichens of Taymyr provided the subject for various publications, and her scientific heritage included the discovery of *Biatorella contigua* N.S. Golubk. & Piin. As the herbarium curator of the Tallinn Botanical Garden, she became one of the pathfinders in natural science education, especially in organising exhibitions of fungi and lichens.

Taimi Piin-Aaspõllu was a renowned representative of the Estonian school of lichenologists whose passion for lichens set an example for many of us. Her lichen collections are preserved in the herbaria of the Tallinn Botanical Garden (TALL) and in the University of Tartu (TU).

Jüri Martin, Tallinn

For a longer text, see *Folia Cryptogamica Estonica* 49: 97–98 (2012

http://www.ut.ee/ial5/fce/fce49pdf/fce49_tpa-in-mem.pdf

IAL Advisory Committee

The cover-page illustration

Cladonia botrytes by Bethia Brehmer, first published in *American Arctic Lichens* Vol 1. *Macrolichens* by J.W. Thomson

Erratum

In the recent pdf version of the *IAL Newsletter* **45** (1): 4, *Aspicilia crespiana* Rico was erroneously listed as named in honour of Ana Crespo, but it is actually dedicated to Luis Crespi Jaume (Madrid, 1889-1963).