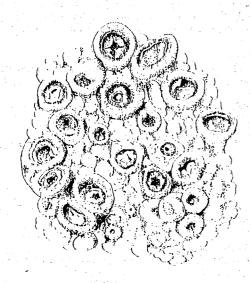
INTERNATIONAL LICHENOLOGICAL NEWSLETTER

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The International Lichenological Newsletter is the official organ of the International Association for Lichenology (IAL). It is published three times a year in English with selected items in French, German or Spanish. Information and news intended for publication should reach the editor at least one month prior to scheduled production (February, June and October of each year).

IAL membership is open to anyone who has an active interest in the study and use of lichens. The subscription is US \$ 20.00 or DM. 30.00 for a four-year period. Subscriptions should be

sent to the Treasurer or Deputy Treasurer:

H. Thorsten Lumbsch, Fachbereich 9/Botanik, Postfach 103 764, D-45141 Essen, Germany. Please transfer the equivalent in Deutschmarks (DM 30.00) to the following postal giro account: 1344 59-431 at the Post Office Essen (Bank code 360 100 43). Cheques will not be accepted, unless they are made payable to DM 36, since otherwise the bank fees will overstretch the IAL budget!

North American members can send their subscriptions to:

Clifford W. Smith, University of Hawaii at Manoa, Department of Botany, 3190 Maile Way, Honolulu, HI 96822, USA. Cheques should be made payable to International Association of Lichenologists.

or (for british members) to: T.H. Moxham, Mayfair House, 21 Ashgrove, Peasedown St.

John, Bath, Avon, BA2 8EB, U.K. (subscription price £13.00)

IAL affairs are directed by an Executive Council elected during the last General Meeting. Council members elected at the IAL 2 symposium (Lund, Sweden, 1992) are listed below and will serve until 1996.

IAL EXECUTIVE COUNCIL 1992-1996

President: Ingvar Kärnefelt, Department of Botany, University of Lund, Ö. Vallgatan 18-20, S-223 61 Lund, Sweden.

Vice-President: Jack Λ. Elix, Chemistry Department, Australian National University, P.O. Box 4, Canberra ACT 2600, Australia.

Secretary: André Aptroot, Centraalbureau voor schimmelcultures, P.O. Box 273, NL-3740 AG Baarn, The Netherlands.

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Members-at-Large: Paula DePriest (Washington, USA), Gintaras Kantvilas (Hobart, Australia), Bruce McCune (Corvallis, USA), Wendy Nelson (Wellington, New Zealand), Pier-Luigi Nimis (Trieste, Italy), Sieglinde Ott (Düsseldorf, Germany), Tiina Randlane (Tartu, Estonia), Leopoldo Sancho (Madrid, Spain), Gernot Vobis (Bariloche, Argentina), Dirk Wessels (Pietersburg, South Africa), Hiroyuki Kashiwadani (Tsukuba, Japan).

RESEARCH NEWS & NOTES

Crittenden, Peter (Nottingham, UK) has recently returned from study leave at the Australian Antarctic Division (AAD), working both at Casey Station in the continental Antarctic and at AAD's HQ at Kingston, Tasmania. He was investigating nitrogen and phosphorus input to lichen communities in summer snow fall and the capacity for uptake by lichens from snow meltwater. Other news from Nottingham: Louise Turbin is near completion of her Ph.D. thesis on the growth and physiology of lichen-forming fungi in pure culture; Marko Hyvärinen is investigating the effects of acid deposition on the chemical composition of Cladonia portentosa in the British Isles (the first paper from this work will appear in the New Phytologist in early 1996); Gareth Murtagh has just begun work on reproductive strategies in Antarctic lichens.

Daniëls, Fred (Münster, Germany) and Vagn Alstrup spent four weeks of last summer in North Greenland (Kronprins Christian Land and Mylius Erichsen Land; ca. 80-81° N. Lat.). They studied the lichen flora and the vegetation in several botanically unknown localities and made comprehensive lichen and moss collections and many vegetation relevés.

De Vries, Bernard (Regina, Saskatchewan, Canada) spent a total of 7 days in

August 1995 in the Caribou Mountains, an extensive (913 000 H.) elevated (920-1030 m) saucer-shaped plateau approximately between 58º 38' and 59º 40' N and 114º 00' and 116º 55' W west of the 5th meridian, in the company of Vern Neal, who helped with the field trips, and Caribou researcher Kim Morton. This remote region is part of the northern Alberta uplands, and lichenologically poorly known. The dominant vegetation is Picea mariana/Sphagnum/Čladonia over peat and discontinued permafrost. An extensive peatland of the patterned fen or mire type is located in the northern part. The vascular as well as nonvascular flora of this area has northern boreal and sub-arctic affinities. The main objective was to study woodland caribou habitats in undisturbed areas and on regenerated old burns, to establish their influence upon the general vegetation, especially the lichen flora, and on the resident woodland caribou. The project was realized in 3 steps: 1. fly over to estimate general vegetation and lichen cover of potential caribou habitat, 2. mapping of woodland caribou habitat, 3. in situ study of the lichen flora and associated vegetation. As part of an ongoing study, a compilation of a synopsis of the unique lichen flora of the Caribou Mountains is planned. About 140 lichen samples were collected and 10 critical caribou habitat sites identified.

73 Lichens, 47 mosses, 12 liverworts and 15 vascular plants were identified. as new to the Caribou Mountains. It is hoped that the study will support efforts towards protection of this unique boreal-subarctic upland plateau, which is seriously threatened by increasing seismic explorations and well drilling, under the international biosphere preserve program. It is anticipated that the results of this project will be published in the near future. Bernard wishes to address his sincere thanks to the council of Little Red River Cree Nation, its advisor Vern Neal, who made this all possible, and the curator of the Ledingham Herbarium. who identified the bryophytes.

Engels, Petra (Cologne, Germany) successfully defended her Ph.D. dissertation on "Relationships within the lichen family Ramalinaceae (Lecanorales) in the Canary Islands, under special consideration of the isoenzyme patterns" at the University of Cologne in June, 1995. Her supervisor was Gerhard Follmann. The patterns seof six common enzymes (e.g., CAT, EST, SOD) in 130 samples of 25 of the 29 Ramalinaceae known from the Canary Islands have been analyzed by isoelectric focusing and compared with all other biosystematic markers available like spore measures or secondary compounds, including substrate nature, altitudinal distribution, etc. An evaluation of the results by numerical dendrograms shows that the representatives of Fistulariella, Niebla and Ramalina s.str. form individual clusters, confirming the disputed independence of these genera. Moreover, the observations suggest that the variable Ramalina decipiens group represents a separate genus as well. New combinations are proposed under Niebla, and the essential characteristics and interrelations of the taxa studied are summarized in several synoptic tables. An overview of the most important results of this dissertation will be published in the near future.

Follmann, Gerhard (Cologne, Germany) visited North Australia (mainly Northern Territories and Queensland) during the last South Hemispheric winter. The main purpose of this field trip was to study the colonization of mangroves by Roccellaceae, which are locally not as scarce as could be expected from the few notes in the floristic literature. Particularly interesting finds have been made on the islands in, and along the coast of, the Gulf of Carpentaria (e.g., Sir Edward Pellew Group, new species of Roccella). In addition, the lichen flora and vegetation of inselbergs which rise above the uniform monsoon forest (e.g., in Arnhem Land) have been explored, especially in comparison with current work on lichens of inselbergs in tropical Africa performed by Uwe Becker (Botanical Institute, University of Cologne). The selected collections brought home have been prepared and are now stored at KOELN.

Kalb, Klaus (Neumarkt, Germany) has returned from a 7-week field trip in Australia, where he visited Western Australia, Northern Territory (Keep River National Park, Gregory NP and Kakadu NP), Queensland, New South

Wales and ACT. He was splendidly supported by his Australian colleagues Nathan Sammy, Rod and Yvonne Rogers, Jack and Joan Elix and Gintaras Kantvilas, for which he is very grateful. His research team at Regensburg University is in full activity. Over the past year Bernhard Marbach has been preparing a world monograph of (sub)tropical corticolous Buellia and has just returned from a collecting trip to South America, where he cooperated with Marcelo Marcelli and Mariana Fleig (Brazil), Hector Osorio (Uruguay), Nora Scutari, Monica Adler, Cecilia Estrabou, Verónica Fernández, Lia Garcia, Gernot Vobis and Maria Messuti (Argentina). He is very grateful for their support. In addition he visited Peru. Bettina Staiger's completed monograph of Ilaematomma has been published as Bibliotheca Lichenologica 59. She has now begun a revision of the family Graphidaceae as her Ph.D. thesis and is investigating all type species of over 50 genera. Irene Nätebusch has completed a study of Pertusaria. She intends to reintroduce some previously recognized genera, since she has found additional characters to support these. Manuela Götz has begun a worldwide revision of the genus Punctelia sensu lat., with special emphasis on chemistry, discovering new substances for the genus, with the kind help of Jack Elix.

Khodosovtsev, Alexander (Kherson, Ukraine) briefly visited Trieste University in February 1996 thanks to the kind and generous help of Prof. Dr. P.-L. Nimis. He had a marvellous oppor-

tunity to work on some publications to clarify the taxonomical position of many Ukrainian lichens in the herbarium and to consult recent lichenological literature lacking in the Ukraine. He sincerely thanks Prof. P.-L. Nimis for his warm welcome and hospitality, for excellent excursions around Venice, and for very interesting meetings with M. Matzer in Trieste and G. Rambold in Venice. He also thanks Mauro Tretiach for hospitality and interesting discussions on Sonoran desert lichens and for an opportunity to take part in the carnival in Trieste.

Kondratyuk, Sergey (Kiev, Ukraine) spent four months in LD thanks to the kind help of Dr. I. Kärnefelt, studying Xanthoria and some Teloschistes species from the whole world (except North America), and continuing his study of lichenicolous fungi associated with Teloschistaceae and Lobariaceae. He is very grateful to the many colleagues and curators who helped him with material and in many other ways, especially Profs. D. L. Hawksworth, T. Ahti, J. Elix and R. Santesson, Drs. D. Galloway, B. J. Coppins, E. Sérusiaux, V. Alstrup, O. Vitikainen, H. Sipman, R. Moberg, K. Ammann, P. Clerc and Mrs. B. H. Macmillan. The generous help and warm hospitality of Dr. E. I. Kärnefelt and Dr. U. Söchting during his stay in Lund and Copenhagen were particularly appreciated, as was the great help provided by the staff members of the Botanical Museum and the Department of Systematic Botany in Lund and the Department of Mycology and the Botanical Museum in Copenhagen. He is grateful to the

Swedish Institute for financial support and is much obliged to Prof. P.-L. Nimis for support of Ukrainian lichenologists in many respects.

Lindblom, Louise (Lund, Sweden) is continuing the revision of the North American species of *Xanthoria*. In August 1995 she made a field trip to coastal regions of New England, New Brunswick and Nova Scotia. She is very grateful to Jim and Pat Hinds for kindly inviting her to their home in Maine.

Lumbsch, Thorsten (Essen, Germany) has received a "Habilitandenstipendium" from the Deutsche Forschungsgemeinschaft (DFG) to prepare his habilitation "Systematische on Untersuchungen an ausgewählten Gruppen der Lecanorales und Pertusariales". His project will concentrate on ascoma development, ascus structure and other anatomical characters in the Agyriineae, Pertusariales and the centre of the Lecanorales (Candelariaceae, Lecanoraceae, Parmeliaceae). In addition, he will continue his studies on the genus Lecanora. In cooperation with Jack Elix he is compiling a treatment on Lecanora in Australia for the Flora of Australia project and with Roland Guderley he started to work on neotropical species for the Flora Neotropica project. Any material for examination is always appreciated.

Peine, Jörg (Cologne, Germany) successfully defended his doctoral thesis entitled "Biosystematic studies on the representatives of the lichen genus Roccella DC (Roccellaceae, Opegra-

phales) found on the Canary islands, under special consideration of protein banding patterns" in June, 1995. For many years Jörg acted as collegiate and scientific assistant of Gerhard Follmann (Cologne). His dissertation is a detailed and critical analysis of all available biosystematical characters, from gross morphology to micromolecular chemistry, including chorological and ecological data. Various new chemotypes have been identified, and according to modern concepts 14 well defined species are accepted, some of ... which are highly endangered. Contrary to former assumptions, true Roccella tinctoria has not been detected on any of the islands. The Roccella population of the Canary Islands clearly represents two evolutionary lines, a view corroborated by the protein banding patterns. A key for the identification of Central Macaronesian Roccella taxa replaces older, partly impracticable ones. An overview of the most important results of this dissertation will be published in the near future.

Sipman, Harrie (Berlin, Germany) returned from a five-week field trip to Papua New Guinea in October-November 1995, together with André Aptroot (The Netherlands), Peter Lambley (UK) and Emmanuel Sérusiaux (Belgium). They collected additional material for planned lichen treatments for New Guinea. After a trip in 1992, where the Highlands near Mount Wilhelm and various lowland sites in Madang province were inventoried, an upland area in the Owen Stanley Range and lowland areas adjacent to Mount Wilhelm were visited.

The fieldwork has brought the number of available lichen collections from New Guinea up to well over 10.000, including many crusts. Treatments of several groups are in progress, and people interested in revising additional groups are very welcome to contact us. A field trip to Guyana, originally scheduled for September last year, took place in February. It concerned an expedition organized by Paula Depriest from the Smithsonian Institution in Washington; further participants included Ted Ahti and Robert Lücking.

Tehler, Anders (Stockholm, Sweden) has succeeded Nils Lundquist as the professor in cryptogamic botany at Naturhistoriska Riksmuseet. He is now in charge of the herbaria of lichens, fungi, algae, mosses and ferns. His new address, fax, email and phone are: Anders Tehler, Professor, (Head of Department), Sektionen för Kryptogambotanik, Naturhistoriska Riksmuseet, Box 50007, S-104 05 Stockholm, Sweden, Fax +46-8-666-4221; E-mail: anders.tehler@nrm.se; Tel. +46-8-666-4160.

Werner, Birgit C. (Cologne, Germany) finished her MSc thesis entitled "Differentiation of the lichen genus Roccella (Roccellaceae, Opegraphales) on the Galápagos Islands", conducted under the guidance of Gerhard Follmann. This extensive study is based mainly on the large collections made on the Galapagos islands by W. A. Weber (COLO), L. Sánchez-Pinto (TFMC), and G. Follmann (KOELN), supplemented the author's own gatherings.

The most common corticolous species, Roccella babingtonii, does not show any noteworthy chemical, morphological, or ecological differences on the single islands of the archipelago. On the contrary, the saxicolous Roccella portentosa sp. coll. experienced marked alterations due to adaptive radiation. By the application of various classical and modern methods, nine well defined monophyletic schizoendemics have been distinguished, which occupy distinct ecological niches on different islands. Hitherto, except for Roccella galapagoensis sp. coll. no formal descriptions of these have been prepared, a task which will be carried out with the supervisor after a cladistical analysis of the entire genus.

Mikhail Zhurbenko (St.Petersburg, Russia) has finished a list of lichens and lichenicolous fungi of the northern Krasnoyarsk Territory (660 and 61 taxa, respectively). It is the first compilation of this sort for northern Central Siberia, and will be published soon in Mycotaxon). The work has taken great advantage from opportunities to work in the Herbaria of the Universities of Helsinki, Graz, Copenhagen and Uppsala, and from help of many colleagues. In this connection he would like to express his special thanks to Rolf Santesson, Roland Moberg, Leif Tibell, Teuvo Ahti, Ulrik Søchting, Eric S. Hansen, Helmut Mayrhofer, Josef Hafeliner, and particularly the late Josef Poelt. In the meantime he continues his studies on lichens and lichenicolous fungi of the Taimyr, as part of a Russian-German cooperative project for a multidisciplinary investigation of the territory under the leadership of the Alfred Wegener Institute in Germany and the Arctic & Antarctic Research Institute in Petersburg. Interested colleagues are welcome to take part in studies of this still very fragmentarily known territory. His new email address is: kovalenko@glas.apc.org.

Requests

Galun Margalith (Tel Aviv, Israel) would be grateful for a culture of *Nostoc* that was isolated from the cephalodia of *Peltigera aphthosa*. Dept. of Botany, Symbiosis Research Laboratory, Tel-Aviv University Tel-Aviv 69978, Israel.

IAL 3 - Progress and Problems in Lichenology in the Nineties

The second and final circular of this symposium, to be held from 1-7 September

in Salzburg, Austria, has now been sent out.

All members of IAL should have received a copy by now. If you wish to have one, please contact: Lichen Symposium IAL 3, Dr. Roman Türk, Institute of Plant Physiology, University of Salzburg, Hellbrunnerstrasse 34, A-5020 Salzburg, Austria. Tel.: +43 662 8044 5588; fax: +43 662 8044 619. E-mail: roman.tuerk@sbg.ac.at. It is also available on INTERNET: http://www.edvz.sbg.ac.at/pfl/ial3/second.htm.

The program includes lectures over five days, as well as three excursions before

for after the symposium.

Correction:

In the Second Circular, page 6, an error has occurred. The conveners of Section D, Chemistry, are:

E. Manrique-Reol, Madrid, and T. Lumbsch, Essen.

General meeting of the IAL in Salzburg

A General Meeting of the IAL will be held during the IAL Symposium in Salzburg in Austria, on Thursday September 6, 1996. All members of the IAL are urged to attend this meeting to discuss the following:

AGENDA

1. Apologies for absence

2. Minutes of General Meeting, Vancouver, Canada, August 19 1994 (see IAL

Newsletter 27, 3: 42-52 (1994)

3. IAL dues (see Newsletter 27, 1: 3 (1994))

4. Publishing of Newsletter

5. New funding

6. Officers' reports {President, Secretary, Treasurers, Editors}

7. Future IAL activities

8. Any other business

9. IAL awards: Acharius Medal, Mason E Hale Award

10. Election of Officers and Council members

Ingvar Kärnefelt, President

The IAL Lichen Biology Fund for travel grants

Through an idea by Tom Nash to donate all or part of the fees due from Cambridge Press for the publication of <u>Lichen Biology</u> to IAL, a new fund has become available, the "IAL Lichen Biology Fund for travel grants". This new fund aims especially at students or other IAL members who have difficulties in obtaining sufficient travel money from their home countries to attend IAL meetings.

The Fund will now be open for the first time, for applications concerning the IAL meeting in Salzburg begin September 1996. As <u>Lichen Biology</u> has only been

published recently, a limited amount of money is available at present.

Send your applications as letter, fax or e-mail as soon as possible, including a brief plan and budget. Applications should be sent to the President, Dr. I. Kärnefelt, Botanical Museum, Dept. of Systematic Botany, Östra Vallgatan 20, S-223 61 LUND, Sweden, Tel 46 (0)46 222 95 58 fax 46 (0)46 222 42 34 Email: Ingvar.Karnefelt@botmus.lu.se

The California Lichen Society

The California Lichen Society, with an original roster of 10 members in January 1994, now has a membership of 107, and continues to grow each month. Our members, although mostly from California, represent eleven states and Canada, and all levels of expertise in matters lichenological. These facts show an increased awareness about lichens at least in our western states.

In the List of Societies of the preceding issue of the Int. Lichenol. Newsletter

there was a mistake in the address. The correct address is:

Info: Janet Doell, 1200 Brickyard Way #302, Pt. Richmond, CA 94801, USA.

Janet Doell

Flora Neotropica: progress in lichens 1995

FLORA NEOTROPICA is intended to be a complete monographic flora of the tropical American region. The monographs are written by specialists and published for the "Organization for Flora Neotropica" (OFN) by The New York Botanical Garden. As of 1995, about 70 monographs have been published and more than 150 botanists have offered to submit monographs in the future. A complete list of monographs published can be obtained from the Executive Director of FLORA NEOTROPICA, E. Forero, New York Botanical Garden, Bronx, NY 10458-5126, U.S.A.

FLORA NEOTROPICA is one of the few tropical flora projects which includes cryptogams. Several treatments of non-lichenized fungi have been published and monographs of bryophytes have appeared annually since 1990. The first lichen monograph appeared in 1991 and several more are in press. The present report summarizes progress in the field of lichens. Specialists interested in contributing a monograph dealing with a family or genus of lichens to the series are invited to write to the Deputy Director of Cryptogams, S. R. Gradstein, Systematisch-Geobotanisches Institut, University of Göttingen, Untere Karspüle 2, 37073 Göttingen, Germany (new address as of November 1, 1995).

Published monographs may be ordered from the Scientific Publications Department, New York Botanical Garden, Bronx, NY 10458-5126, U.S.A., telephone

718-817-8721, FAX 718-817-8842.

New monographs offered in 1995:

Genus Lecanora (Lecanoraceae). Number of species unknown.

By T. Lumbsch, Fachbereich 9 (Botanik), Universtät Essen, D-45117 Essen, Ger-

many. Deadline 1999.

The usnic-acid containing genera of Parmeliaceae: 12 genera, including Everniopsis, Flavoparmelia, Flavopunctelia, Hypotrachyna, Parmeliopsis, Parmotrema, Pseudoparmelia, Psiloparmelia, Relicina, Relicinopsis, Rhizoplaca and Xanthoparmelia. Estimated number of species: 120.

By T. H. Nash III, Arizona State University, Box 871601, Tempe, AZ 85287-1601, USA, together with C. Gries (ASU) and J. A. Elix (Canberra, Australia). Deadline:

2000.

Family Opegraphaceae pro parte: the genera Bactrospora, Cresponea, Lecanactis, Lecanographa and Sagenidiopsis. Estimated number of species: 29 species.

By J. Egea, Dept. de Biologia Vegetal, Universidad de Murcia, 30071 Murcia, Spain Deadline: 1997.

Monographs in press:

Caliciales by L. Tibell, Uppsala: 51 species in 17 genera (6 families).

Syncesia (Arthoniales), by A. Tehler, Stockholm: 17 species.

Monograph (pre)reviewed:

Cladoniaceae by T. Ahti, Helsinki: 150+ species. A portion of the manuscript has

been checked for style. The manuscript is in the final stage and should soon be ready for submission.

Further progress in 1995:

Foliicolous lichens by R. Lücking, Abteilung Spezielle Botanik, Universität Ulm, Germany. The author has received a 2-year post-doc stipendium from the Deutsche Forschungsgemeinschaft (DFG), beginning September 1995, to work on this important monograph. The treatment will deal with the following groups:

Asterothyriaceae (ca. 30 spp.). Deadline: end 1996.

Ectolechiaceae (ca. 30 spp.); co-author: M. Matzer (Graz, Austria). Deadline: end 1997.

Gomphillaceae (ca. 100 spp.); co-author A. Vezda (Brno, Czech Republic). Dead-line: end 1998.

Pilocarpaceae (ca. 45 spp.); co-author E. Farkas (Vácrátót, Hungary). Deadline: end 1998.

Aspidothelium (ca. 7 spp.). Deadline: end 1997.

Chroodiscus (ca. 5 ssp.). Deadline: end 1997.

Mazosia (ca. 15 ssp.); co-authors: K. Kalb (Neumarkt, Germany) and G. Thor (Japan). Deadline: end 1996.

Trichothelium (ca. 20 spp.). Deadline: end 1997.

Summary of lichen contributions to Flora Neotropica as of 1995:

Arthoniales

Syncesia (17 spp.)

Asterothyriaceae (ca. 30 sp.)

Bacidiaceae

Phyllopsora (18 spp.)

Caliciales (51 spp., 17 genera)

Cladoniaceae (150+ spp.)

Collemataceae

Leptogium azureum group (20 spp.)

Ectolechiaceae (ca. 30 spp.)

Gomphillaceae (ca. 100 spp.)

Lecanoraceae

Lecanora Opegraphaceae

Bactrospora (8 spp.), Cresponea (4 spp.), Lecanographa (8 spp.),
Saggidionsis (1 spp.)
J. Egea (Murcia)

Sagenidiopsis (1 spp.)

Pannariaceae (ca. 40 spp.)

Parmeliaceae

The usnic-acid containing genera of Parmeliaceae

(12 genera, ca. 120 species)

A. Tehler (Stockholm), monograph in press R. Lücking (Ulm)

L. Brako (St. Louis), FN Monograph 55, 1991 L. Tibell (Uppsala), monograph in press T. Ahti (Helsinki)

M. Lindström (Göteborg)
R. Lücking (Ulm) & M.
Matzer (Graz)
R. Lücking (Ulm) & A.
Vezda (Brno)

T. I. ...h. (Fusen)

T. Lumbsch (Essen)

P.M. Jörgensen (Bergen)

T. Nash (Tempe) together

Peltigeraceae

Peltigera (ca. 20 spp.) Physciaceae (= Pyxinaceae) Pilocarpaceae (ca. 45 spp.)

Ramalinaceae (ca. 80 spp.)

Stereocaulaceae (25 spp.) Stictaceae s. l. (75 spp.) Trypetheliaceae (150 spp.) Umbilicariaceae (ca. 15 spp.) Other groups:

Genus Aspidothelium (ca. 7 spp.) Genus Chroodiscus (ca. 5 spp.) Genus Mazosia (ca. 15 spp.)

Genus *Trichothelium* (ca. 20 spp.)

with C. Gries (Tempe) and J. A. Elix (Canberra)

O. Vitikainen (Helsinki) R. Moberg (Uppsala) R. Lücking (Ulm) & E. Farkas (Vácrátót) H. Kashiwadani (Tsukuba)

H. J. Sipman (Berlin)
D. Galloway (Opoho)

R. Harris (New York)

G. Hestmark (Oslo)

R. Lücking (Ulm)

R. Lücking (Ulm)

R. Lücking (Ulm), K. Kalb (Neumarkt) & G.

Thor (Tsukuba)

R. Lücking (Ulm)

Report of the OPTIMA Commission of Lichens: summary of presentations held in Sevilla, Spain, September 1995

Mediterranean Lichens: an introduction

The high lichen biodiversity of the Mediterranean region deserves special attention from lichen taxonomists and ecologists. The retrieval and interpretation of ancient floristic data is a difficult task, as this information was often published in minor journals, or in exsiccata; furthermore, the voucher materials are dispersed in numerous herbaria, many of which are located outside the Mediterranean area. The foor management of many European cryptogamic herbaria is another source of difficulty, which often makes consultation of the material very problematic. The O.P.T.I.M.A. Commission for Lichens intends to improve this situation by facilitating access to bibliographical information, with the publication of regional check-lists as a necessary first step towards the compilation of a general lichen check-list for the whole of the Mediterranean region. Some of the problems encountered during this activity, and some of the most important results will be presented during this symposium.

X. Llimona, Departamento de Biologia Vegetal, Barcelona (Spain)

The Lichen Flora of Tunisia

Previous interpretations of the Tunisian lichen flora in the 1950s were based on 186 recorded species listed in fragmentary and widely scattered published sources. A detailed literature survey, supplemented by herbarium studies, including those on collections made by the author in 1973, has shown the currently known Tunisian lichen flora to comprise 411 taxa (394 species, 3 subspecies, 11 varieties and 3

forms). Accepting that Morocco and Algeria are larger in area than Tunisia, their lichen diversities of more than 630 and 575 taxa respectively would suggest that this Tunisian list should be probably expanded by 40%. Therefore, much remains to be done in terms of (a) a more comprehensive examination of existing Tunisian lichens in numerous herbaria, (b) more detailed fieldwork, including extensive ecological investigations, and (c) phytogeographic interpretation. In the meantime, case studies of select habitats and species will be discussed in the wider context of the Mediterranean lichen flora.

M. R. D. Seaward, Dept. of Environmental Science, Univ. of Bradford (UK).

Towards a Check-list of Mediterranean Lichens: state of the art and future activities

A fundamental pre-requisite for the compilation of a Check-List of Mediterranean lichens is the publication of updated national check-lists. The Check-list for Italy was published in 1993, and will be updated every 5 years. By the end of 1995 the following areas will be also covered: Iberian Peninsula (Spain and Portugal), Israel, Morocco, Tunisia, Mediterranean Turkey. The Check-lists for southern France and Slovenia should be available by 1997. The following areas are still uncovered by a modern check-list, and are also generally poorly-known from a lichenological point of view: Albania, Algeria, Croatia, Cyprus, Egypt, Greece, Libya, Lebanon and Malta. On the basis of the information available, the relations between surface area, ecological diversity and number of taxa for Mediterranean countries is discussed. The future activity of the O.P.T.I,M.A. Commission for Lichens should be centered on two main points: a) promoting the compilation of checklists for those areas which are still not covered; b) promoting joint field work in poorly-known parts of the Mediterranean Region. These activities, which will last approximately for the next three to four years, should provide a consistent body of knowledge on which the compilation of a general Check-List, with the collaboration of several regional advisers and specialists, could be based.

P. L. Nimis, Dept. of Biology, The University, Trieste (Italy).

A Lichen Check-List of the Iberian Peninsula and Balearic Islands

The main aim of this work on the lichen flora of Spain and Portugal, is the production of a detailed check-list in the form of a guide to the bibliographical sources of published floristic information by the Spanish Lichen Society. The database is produced in a FoxPro version, adapted by Dr. N. L. Hladun. Each entry (usually a species name) is followed by the citation, in chronological order, of the sources (authors, date of publication) including page and number of references. Up to now, 1466 sources have been incorporated (170 with data from Portugal only, 824 from Spain only). Altogether, 41.576 data are entered, each usually corresponding to 1-10 records. Comments on the preparation of this bibliographical list are made, such as treating problems, searching for sources, assembling a thesaurus of sources, entering of information, and search for valid names. A comparison between the check-list information and the results of work with herbarium and self-collected material is made in the cases of treatments of several lichen genera such as *Rinodina*, *Ochrolechia* and *Diploschistes*.

M. Giralt, Departamento de Biologia Vegetal, Barcelona (Spain)

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Lichens of the Mediterranean Region of Turkey

The delimitation of the Mediterranean part of Turkey is critically discussed. This area includes nine provinces directly adjoining the Mediterranean sea, and two adjacent provinces. The Lichen Check-list of Mediterranean Turkey is based on literature records, on herbarium specimens, and on the results of original field work. For several species, the distributional data have been arranged on a gridscheme. A brief history of lichenology, and a bibliography concerning the lichens of Turkey is presented. Existing information on the lichen flora of this area is summarized, and particularly poorly-known areas are suggested for further field work.

V. John, Pfalzmuseum für Naturkunde, Bad Dürkheim (Germany)

The Lichen Flora of Morocco

A preliminary Check-list of the Lichens of Morocco has been compiled, based on literature data, and on the results of original investigations in that area. For each taxon, the following information is included: basionym, the most relevant synonyms, and bibliographical references, given separately for 9 geographical subdivisions of Morocco. A brief history of the lichenological exploration of Morocco is presented. The results of the Check-list allow identification of the main areas for which further field work is particularly urgent.

J. M. Egea, Dep. de Biologia Vegetal, Facultad de Biologia, Murcia (Spain)

Discussion List on Lichens

The purpose of this list server is to promote communication among lichenolo-

gists on any topic that may be of interest to participants.

For example, in preparation for the Salzburg IAL meeting, we would like to hear from lichenologists regarding the preparation of a world-wide list of endangered lichens for IUCN. Though a complete listing is almost impossible to achieve, we would like to have a representative list of approximately fifty lichens ready for The Salzburg meeting. A questionnaire has been developed which will be distribë utcd soon.

The list server will also serve as a means of disseminating information rapidly and alerting subscribers to world wide web sites with lichen information.

If you are interested, please send the following message to the

listproc@hawaii.cdu

SUBSCRIBE LICHENS-L YourFirstName YourLastName If you have any questions, please contact Cliff Smith at cliff@hawaii.edu.

Cliff Smith

Field meeting in Devon, England

The 1996 summer field meeting of the <u>Dutch Bryological</u> and <u>Lichenological</u> Society will be held from 22th till 31th July in Devonshire, England. The summer field meetings are popular among Dutch amateur and professional bryologists and

lichenologists, who often bring their families. Many interesting floristic observations are expected, since this summer's meeting site is situated in an area with very little air pollution and a pronounced oceanic aspect. The DBLS welcomes participation from outside the Society, in particular from the U. K. The meeting will be based on a camping site at Bovey Tracey: Coombe Park, Coombe Lane, Bovey Tracey, South Devon, TQ13 9PH, U. K. Those who are interested in attending should contact for further information: Klaas van Dort, Graspieperweide 4, 6708 LR Wageningen, The Netherlands; tel. 0317-413758.

Lichenological Working-Group Cladonia in Slovakia

In 1985 the "coach" of the Slovak lichenological team, following the moral of an old Slavic fable - "union is strength", hit upon a good idea, I. Pisut - crucial personality in the team - found it indispensable to establish an informal, organized society (since 1993 as formal unit of Slovak Botanical Society). So the idea was born. As a nameless subject is usually considered as not alive, in a sense, a second step was taken was taken - to give "a label". The result was the Lichenological Working-Group Cladonia.

Since 1985 a ritual border-line passing "Appertio anni lichenologici" in February and in October (later "Vindaemia lichenologica") has been dividing each year into two parts. Periods filled with field-trips, seminars and other "scientific events" are alternating with periods, characterized by systematic examination of material

collected.

In 1988 the Cladonia founded a tradition of Bryo-Lichenological Days. Since then these have been organized in cooperation with Czech colleagues, taking place

either in Slovakia or the Czech Republic.

The past botanical year was fruitful, with seminars on projects within the framework of EECONET, on the state of the lichen flora in north-western Slovakia, damage by air pollution, and many others. Searching for interesting species (c. g. Cladonia portentosa, Peltigera malacea) and mapping of endangered lichens in south-eastern Slovakia was the aim of field trips.

Anna Lackovicova

Eastern Lichen Network

The Eastern Lichen Network, some 20 lichenologists linked electronically, has started a long-term collaborative project to describe the lichen flora of Eastern North America - west to the prairie border and north to the Arctic (about 54 degrees N). The goal of the project is to encourage members to choose a genus, write up descriptions and keys to the species found in eastern North America, and begin work on a distribution map. Jim Hinds has provided a model by launching the project with the genus *Parmelia*. While it would be unfair to say that genera are going like hotcakes, those which are mono-specific in the region, or recently monographed have been suggested as starting points. For questions, suggestions or if

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you are interested in joining the Eastern Lichen Network, please contact Marian Glenn via e-mail at GLENNMAR@LANMAIL.SHU.EDU.

Marian Glenn

Symposium Proceedings from IAL2 in Bastad

The publication of the IAL2 proceedings was marred by problems in the technical editing. Being responsible for the scientific editing, it was most distressing and frustrating for me to see the publication process thwarted and delayed for such an unreasonable time at the technical editing and publication stage. It was also less than satisfactory to have the proceedings fragmented into five issues of <u>Cryptogamic Botany</u> (not to mention incidents like one issue, Vol. 4, No. 4, being published with a symposium cover - but containing no symposium papers!).

In retrospect, it is little comfort that it may be seen as part of the disintegration process of the journal, which has led to it being discontinued after volume 5.

A current problem is that the symposium papers may not be easily available to the participants. At an early stage during my time as scientific editor I raised the matter of sale of the symposium proceedings at a special price to the participants of the symposium (and possibly other private persons) with the technical editor and publishing company repeatedly. I suggested special sales efforts, a suitable price level and twice supplied address lists of participants at the symposium, strongly urging the publisher to offer them a special offer for buying the issues. Nothing ever happened, unfortunately.

Now I have received information about the stock situation of the issues which is quite worrying. According to a letter from the Fischer Verlag Periodicals Department there is of Vol. 4, issues 2 and 3 only 50 copies in stock left, and of vol. 5, issues 1, 2 and 3 only 70 copies. Vol. 4 and 5 can be bought for DM 170 each; single issues can be bought for DM 42.50.

The contents of the issues are as follows:

Vol. 4, No. 2: Section I. Ecology and Ecophysiology.

Vol. 4, No. 3: Section II. Morphology and Development.

Vol. 5, No. 1: Section III. Chemistry and Chemotaxonomy. Section IV. The DNA and RNA data in Lichen Studies.

Vol. 5, No. 2: Section V. Systematics and Phylogeny. Section VI. Reproduction and Dispersal. Section VII. Biogeography.

Vol. 5, No. 3: Section VIII. Bioindication and Conservation. Section IX. Biodeterioration.

For orders the address is: Periodicals Department, Gustav Fischer Verlag, Postfach 720143, D-70577 Stuttgart, Germany. Phone: 0711/458030; Fax: 0711/4580334.

Leif Tibell

Advanced Course on Lichenology

A course "Biology and Systematics of Lichens and Lichenicolous Fungi" will take be held in Lövstabruk, N of Uppsala, May 5-17, 1996.

The course is open to research students and scientists in a post-doc. phase and is funded by NorFA, a Nordic agency for promoting higher research education. Twenty participants form the Nordic countries will take part and extra funds have also been supplied for ten participants from the Baltic Countries and Western Russia.

Dr. Leif Tibell (Uppsala) has organized the course, and he and Prof. T. Ahti (Helsinki) will be the leaders.

The following specialists will give lectures and lead work-shops during the course: Prof. T. Ahti, Helsinki, Finland; Dr. J. Hafellner, Graz, Austria; Dr. T. Lumbsch, Essen, Germany; Dr. S. Ott, Düsseldorf, Germany; Dr. K. Palmquist, Umeå, Sweden; Dr. J. Rikkinen, Helsinki, Finland; Prof. A. Tehler, Stockholm, Sweden; Dr. L. Tibell, Uppsala, Sweden.

Leif Tibell

New Literature

Fred J. A. DANIELS, Margot SCHULZ and Joerg PEINE (editors). 1995. Flechten Follmann, Contributions to Lichenology in Honour of Gerhard Follmann. 580 pages. Published by the Geobotanical and Phytotaxonomical Study Group, Botanical Institute, University of Cologne. Available from: Koeltz Scientific Books, Koenigstein, Germany. Price: 170 DM. (Contains a short biography of G. Follmann, a complete bibliography of his publications from 1955 to 1994, and 52 contributions on lichens and lichenicolous fungi, about chemistry, anatomy, morphology, physiology, ecology, taxonomy, chorology, sociology and ethnology, by more than 100 authors; several new species and two new genera are described; in English (mainly), Spanish and German.)

Martha DE VALENCIA and Jaime AGUIRRE. 1995. <u>Líquenes. Morfologia. Anatomia, Systemática</u>. 142 Pages. Published by Universidad Nacional de Colombia, Bogota. (An introduction to lichens for students, containing chapters on ecology, morphology, chemistry, taxonomy, a key to the macrolichen genera of Colombia, short descriptions, and in part drawings, of these genera, instructions for collecting and classes; in Spanish.)

Richard C. HARRIS. 1995. More Florida Lichens including the 10c tour of the pyrenolichens. 192 Pages. Published by the author, The New York Botanical Garden, Bronx, NY 10458-5126, U.S.A. (Includes keys to the genera and species of lichens occurring in Florida (USA), with particular emphasis on the pyrenocarpous lichens, and to all species of Anisomeridium; including many new combinations and new definitions for various genera.)

Ludwik LIPNICKI & Hanna WOJCIAK. 1995. Porosty, Klucz - Atlas do oznaczania najpospolitszych gatunkow [Lichens, Key - Atlas for the identification of the commonest genera]. ISBN 83-02-05668-5. Wydawnictwa Szkolne i Pedagogizne, Warszawa. 216 pages. (An illustrated booklet with introductory chapters on lichen morphology, anatomy and ecology, and with keys, descriptions and colour pictures for 95 of the commonest lichens in lowland Poland, mainly macrolichens; it is intended for beginners and hopes to promote the protection of lichens; in Polish.)

Thomas H. NASH III (cd.). 1996. <u>Lichen Biology</u>. 303 Pages. Published by Cambridge University Press, Cambridge, UK. ISBN 0 521 45974 5 (paperback) or 0 521 45368 2 (hardback). Price £16.95 (US\$24.95) and £50.00 (US\$69.95). (An introduction to various biological aspects of lichens, directed at students and scientists; contains chapters by various specialists, usually the leading experts, on topics such as morphology, morphogenesis, metabolism, biochemistry, ecology, biogeography, classification and bioindication.)

Christian PRINTZEN. 1995. <u>Die Flechtengattung Biatora in Europa</u>. Bibliotheca Lichenologica Bd. 60. 275 pages. (A treatment of 17 recognized taxa from Europe, with key, descriptions, discussions of characters and affinities, revision of many types; in German, with English key added.)

Bettina STAIGER & Klaus KALB. 1995. <u>Haematomma-Studien</u>, 1. <u>Die Flechtengattung *Haematomma*</u>. Bibliotheca Lichenologica Bd. 59, p. 1-198, 27 fig. (A treatment of 35 taxa recognized worldwide, with key, descriptions, discussions of characters, heavily depending on chemical properties; including 10 new species; volume includes part II (pp. 199-222) on lichenicolous fungi on *Haematomma* species, by the authors together with Josef Hafellner; in German, with English key added.)

Mats WEDIN. 1995. The Lichen Family Sphaerophoraceae (Caliciales, Ascomycotina) in Temperate Areas of the Southern Hemisphere. Symbolae Botanicae Upsalienses 31:1, 102 pages. (A treatment of 23 species in the genera Bunodophoron, Leifidium and Sphaerophorus, with general chapters on morphology, anatomy, ecology, chemistry, keys to the species, detailed descriptions with distribution maps and many photographs.)

Lichens on-line

The lichenological facilities on INTERNET are expanding rapidly, and the survey below is certainly incomplete. New are, e.g., Cliff Smith's <u>Lichen World</u>, with a list of addresses of lichenologists, and Cliff Wetmore's catalogues of species in the Minnesota University lichen herbarium. The items can be reached conveniently via the info pages. See also the note on the <u>Eastern Lichen Network</u> above.

Additions and comments for this rubric by the suppliers and users would be

highly appreciated. Contributions preferably to be sent via e-mail to: <a href="mailto:-sent-via-e-mailto:-s

A. Access: Info-pages

Several "info-pages" are now available, which provide connections with one or more of the resources listed below, and many other ones which might be of interest.

Mycology - WWW sites of interest (Munich, Germany):

http://www.botanik.biologic.uni-muenchen.de/botsamml/mycology/

mycology.html

Mycology Resources (Cornell University, USA): http://muse.bio.cornell.edu/~fungi/

The Lichens, by Tatsuya Okamoto (Kochi University, Japan): http://www.is.kochi-u.ac.ip/Bio/lichens/lichens.html

B. Lichen herbaria

Lichen types in US; label information for holo- and isotypes. Access: gopher USA-Washington DC-Smithsonian Institution.

Cryptogams of CBG; label information for some 50.000 specimens.

List of lichen genera in S; an alphabetical list of genus names, without authors. Last update:5 Jan. 1994.

Checklist of lichens reported from the three Guianas; a list of lichen names. Last update: 1994. Access: gopher USA-Washington DC-Smithsonian Institution.

Catalogue of the lichen herbarium of the University of Minnesota Herbarium; lists of names of Minnesota and foreign species, types.

C. Addresses

Mycologists Online; addresses of mycologists, incl. lichenologists. Access: gopher USA-Massachusetts-Cambridge-Farlow, or: gopher://musc.bio.cornell.edu:70/11/directories/mo.

E-mail numbers of lichenologists (and mycologists). Last update: December 1995. Access: http://www.botanik.biologic.uni-muenchen.de/botsamml/lias/lias.html. Addresses of lichenologists. Access via Cliff Smith's Lichen World. Access: http://nic2.hawaii.edu/~cliff/.

D. Literature

CATALPA: New York Botanical Garden library catalog. Last update: continuously updated. Access: telnet: librisc.nybg.org

The Lichenologist: Tables of contents of the recent issues from 26(4) onward. Access: gopher://ukoln.bath.ac.uk:7070/11/Link/Tree/Publishing/AcademicPress/APJournals/APJ35.

E. Diversae

LIAS-info pages: LIAS is designed as an information and data storage system for lichenized and lichenicolous Ascomycetes. A first version is under development and will be distributed via CD-ROM. The info pages give information on the taxa

treated, as well as access to some further online information of lichenological interest. Offered by Gerhard Rambold, Germany. Last update: September 1995. Access: http://www.zi.biologie.uni-muenchen.de/botsamml/lias/lias.html.

"Lichen": floristical database with distribution maps of epiphytic lichens of Switzerland. Offered by Christoph Scheidegger, Switzerland. Last update: 1 September 1995. Access: http://www.wsl.ch/rauminf/riv/datenbank/lichen/

database_lichen.html.

"Lichen Information System" issued from the University of Salzburg (in preparation).

"PLANTS database": includes names and distribution of lichens in continental North America (excl. Mexico) (in preparation).

Checklist of Japanese Lichens, by Tatsuya Okamoto, Kochi University.

Lichen World, by Cliff Smith. Contains a list of addresses of lichenologists and the constitution of the IAL.

Second circular of the Third IAL Symposium, Salzburg, 1-7 September 1996: http://www.edvz.sbg.ac.at/pfl/ial3/second.htm.

Personalia

Eugenia G. Kopachevskaya (1927-1995)

The Ukrainian lichenologist Eugenia Kopachevskaya died on August 8, 1995 in her apartment in Kiev, of an acute heart attack. Born on September 29, 1927 in the Donezk region, Ukraine, Eugenia (Zhenya for her friends) graduated from the Biological Department of Kiev University in 1952, and during her whole scientific career was connected with the Institute of Botany of the Ukrainian Academy of Sciences in Kiev. As post-graduate student of the well-known Ukrainian lichenologist Prof. A. N. Oxner, she received the Candidate of Biological Sciences degree from this institute in 1963. Her dissertation was on "The lichens of the forests of the Crimea reserve". Zhenya contributed significantly to the expansion of the lichen herbarium in the Institute of Botany, founded by Prof. Oxner. She participated in botanical expeditions to various parts of the Ukraine with Prof. Oxner and Prof. Mariya F. Makarevich, but her major interest was in the lichen flora of the Crimea peninsula and its communities. She devoted much of her efforts to the publication of the monograph "The lichen flora of the Crimea and its analysis", 1986 (Kiev, Naukova dumka Press, 296 pp., in Russian). As co-author of the Handbook of the Lichens of the USSR, she contributed extensive sections on the genera Lecanora (Placolecanora) and Squamarina (vol. 1, 1971), and the families Verrucariaceae and Polyblastiaceae (vol. 4, 1977).

My personal contact with Zhenya and her husband Oleg B. Blum, who is also a respected lichenologist, goes back to 1965, when I met them at a conference for mycologists and lichenologists. Later I visited the family regularly in Kiev. My visits became more frequent after the Chemobyl accident while I studied its ecological consequences. I remember Zhenya as a warm, attractive, cheerful and courageous woman; a loving and compassionate wife, mother and grandmother; and as a delightful and most capable colleague. She liked classical music, opera and especially ballet. Zhenya was a very good amateur ballerina at the Kiev University

theatre. She passed on her enthusiasm for music to her daughter Olga, who is a teacher of music.

Zhenya's many friends and colleagues mourn her untimely death and share the deep sorrow that is borne by Oleg. She will live on in our hearts and her scientific accomplishments will forever influence lichenologists through the world.

Lev G. Biazrov

Address changes/corrections:

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The front-page illustration

Thelotrema lepadinum (Ach.) Ach., drawn by Dr. Ivan Pisút.