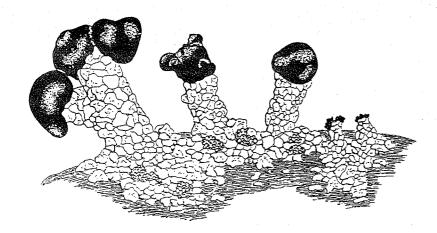
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Editors:

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The opinions expressed in the Newsletter are not necessarily those held by the International Association for Lichenology.

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 S.Fr. 32.00 for the six-year period between successive International Botanical Congresses. Subscriptions should be sent to the Treasurer or Deputy Treasurer.

Robert S. Egan, Dept. of Biology, University of Nebraska, Omaha, NE 68182-0040, USA. Cheques should be made out for <u>US dollars, drawn on a US bank</u>, otherwise it will cost the IAL US \$ 27 for each cheque!

Rosmarie Honegger, Inst. für Pflanzenbiologie und Cytologie, Zollikerstrasse 107, CH-8008 Zürich, Schweiz. In this case please pay S.Fr. 32.00 to the following bank account: Schweizerischer Bankverein (Swiss Bank Corporation, Societé de Banque Suisse), Filiale Albisriederplatz, 8040 Zürich, Switzerland, Account Nr. Pl-560.486.0 in the name of IAL/Honegger. Those who wish to use the Postal Giroservice may use the Postal Account number of the Bank: 80-206-1.

IAL affairs are directed by an Executive Council of thirteen members elected during the last International Botanical Congress. Council members elected at the 14th Congress (Berlin, Western Germany, 1987) are listed below and will serve until the 15th Congress (Tokyo, 1993).

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Members-at-Large: Jack Elix (Canberra, Australia), Ana Crespo (Madrid, Spain), Mason E. Hale, (Washington, USA), Josef Poelt (Graz, Austria), Ingvar Kärnefelt (Lund, Sweden), R. Schubert (Halle, GDR).

IAL COMITTEES

<u>Lichen Conservation Committee</u>

Chairperson: M.R.D. Seaward, School of Environmental Science, University of Bradford, Bradford BD7 1DP, UK

Lichen Terminology Committee

Chairperson: Vernon Ahmadjian, Department of Biology, Clark University, Worcester, Massachusetts 01610, USA

RESEARCH NEWS & NOTES

Ahmadjian, Vernon (Worcester, USA) was visited from 5-9 June by Danieli Armaleo and Philippe Clerc. They shared information on photobiont isolation techniques and DNA isolation methods from lichens and bionts. Together with Afaf Shehata and John Brink, he is studying restriction fragment length polymorphisms in mitochondrial DNA among mycobiont clones of Cladonia cristatella. In particular, comparing RFLPs in clones that lichenize well in culture and those that do not. His student John Brink is studying protein synthesis of C. cristatella clones, using mRNA isolated from the cultured mycobionts. His book, written with S. Paracer, "Symbiosis: an introduction to biological associations", University Press of New England, has gone into a second printing.

Teaching assistantships (on a competitive basis) are available at Clark University to study lichen fungi, for study towards M.A. or Ph.D. degrees. Contact: Vernon Ahmadjian, Dept. of Biology, Clark University, Worcester, MA 01610-1477, USA.

Almborn, Ove (Lund, Sweden) has

issued Fasc. 5 of his exsiccata <u>Lichenes Africani</u>. Copies and odd specimens are available for exchange. Fasc. 6 is in preparation. Material (35 duplicates of each collection) from all parts of Africa and surrounding islands will be appreciated. The Botanical Museum, University of Lund, offers rich duplicate material of Scandinavian lichens (many well-known collectors).

Egea, José (Murcia, Spain) finished his work on the flora and vegetation of lichens in the littoral zone of East and Southeast Spain. Taxonomic revisions have been completed for (1) Heppia and Peltula, (2) the family Opegraphaceae on the Iberian Peninsula and North Africa (in cooperation with Pilar Torrente), and (3) the family Lichinaceae on the Iberian Peninsula and North Africa (in cooperation with P.P. Moreno). The manuscripts of (1) and (2) have been accepted for publication in Bibliotheca Lichenologica. The results of (3) and of the study on lichens in the littoral zone will be dealt with in several articles. In addition, he is completing a study of the ombrophobic communities of the littoral zone of Western Europe and North Africa.

A new project was started on the flora and vegetation of lichens in western Mediterranean coastal lowlands, entitled "Flora y Vegetación liquénica de las tierras bajas costeras entre Almería (España) y Sintra (Portugal). Estudio biogeográfico comparado del litoral mediterráneo de la Peninsula Ibérica con el litoral de Marruecos". This study is supported financially by the Spanish government and should be finished in 1992. It will be carried out in collaboration with P. Torrente, P.P. Moreno, F.L. Alonso and M.J. Baeza from Murcia and J.G. Rowe from Sevilla.

As a continuation of the taxonomic revisionary work investigations of the genus Lecanactis in Europe and North Africa (in collaboration with P. Torrente) and the genus Pertusaria in the Mediterranean region (in cooperation with J.G. Rowe, Sevilla, and E. Manrique, Madrid) are planned. Jose Egea would be pleased to receive specimens in connection with this investigation.

Diederich, Paul (Luxembourg, G.D. de Luxembourg) has successfully completed his doctorate at the University of Louvain-la-Neuve (Belgium) under the direction of Professor J.R. De Sloover.

The title of his thesis is: "Etude taxonomique et écogéographique des lichens épiphytiques et de leurs champignons lichénicoles (macrolichens exceptés) du Grand-Duché de Luxembourg". In cooperation with E. Sérusiaux (Belgium), he is now preparing a computerized database, a checklist and a distribution atlas of the lichens and lichenicolous fungi of Luxembourg, Belgium and Northern France. He assisted G. Clauzade and C. Roux (France) in preparing keys for all the lichenicolous fungi of the world, published recently. In the future he will devote most of his time to the study of lichenicolous fungi.

Farkas, Edit (Vácrátót, Hungary) participated in the Usambara Integrated Rain Forest Project Workshop, 13-17 March, in Morogoro, Tanzania, where she spent four weeks in the field, together with Hildur Krog. She collected many interesting foliicolous lichens. Afterwards she visited Rosemarie Honegger in Zürich (Switzerland) to study foliicolous lichens by SEM.

Fletcher, Anthony (Tony) (Leicester, UK) has returned to England after three years in Washington, D.C., to head the Botany Section of Leicestershire Museums Service (96 New Walk, Leicester

LE1 6TD). He will complete publications on South American *Parmelia* sensu lato and continue studies on the British flora.

Follmann, Gerhard (Cologne, West Germany) spent local springtime in the Atacama Desert (Chile, Peru), where he completed his chorological, ecological, and sociological studies on Roccellaceae-dominated lichen communities, begun 25 years ago. Simultaneously, additional material of rarer species has been re-collected for his world monograph of this unique Arthonialean family, which has its main diversity centre in Pacific South America. For the same purpose, field trips to Namibia and Socotra are planned for the near future.

Hageman, Cecilia (London, Ontario, Canada) successfully defended her PhD thesis in the Department of Plant Sciences, University of Western Ontario. Her thesis was on intrapopulational and intraspecific isozyme variation, and the application of enzyme characters to taxonomic questions in the Umbilicariaceae. In 1989 she also received a law degree and she will now be involved with environmental law and patent law, as well as maintaining an interest in lichen research. She expects to present some of her research at

Madrid in the spring of 1990.

Hansen, Eric Steen (Copenhagen, Denmark) is continuing his studies of epigaeic and epilithic lichen vegetation in Greenland. In 1989 he visited Upernavik, Uummannaq, Mârmorilik and Nûgssuaq in West Greenland and collected a representative material of lichens in these areas. Attention was also paid to lichenicolous fungi. Comprehensive collections of lichenicolous fungi collected by him mainly in more northern parts of Greenland, e.g. Thule, now are available for further studies in collaboration with specialists on this group of fungi.

Lökös, László (Budapest, Hungary) is preparing a checklist of the lichens of Kiskunság National Park, and also made collections, which are being identified now, for a study of the lichens of Aggtelek National Park.

Manrique, Esteban (Madrid, Spain) is starting a study on *Umbilicariaceae* including their distribution on the Iberian Peninsula, chemistry, ecophysiology, physiology, and morpho-anatomical comparative studies. This will be undertaken in cooperation with Dr. Carmen Ascaso, Dr. Leopoldo G. Sancho and Pilar Estebez. A study of the chemistry and dis-

tribution of the genus *Ramalina* in Spain, the doctoral thesis project of Rosario Arroyo, has just been completed, and a chemical screening of macrolichens from Madrid province, the doctoral thesis project of Estela Seriñá, is in progress. Both studies are based on TLC and HPLC techniques.

Recently, studies are being focused on "lichens and air pollution": the pattern of response of four lichen species (Anaptychia ciliaris, Evernia prunastri, Ramalina farinacea and R. fraxinea) when exposed to acute and chronic SO2 fumigations, with or without a nitrate supply, is being studied. Lichen pigment status has been assessed by means of phaeophytination quotient. A synergistic pattern of SO₂-NO₃-mixture interaction has been observed. This work is being done by Luis Balaguer in collaboration with Dr. A.W. Davison (Newcastle University). An inwestigation of nitrate and nitrite reductase activity in lichens and their relationship with NOx and SO₂ pollution is also scheduled. Next October, Dr. Manrique will visit Dr. Davison in Newcastle to work on the effect of ozone fumigation on lichens, measuring the early chlorophyll fluorescence response, CO2 exchange and superoxide dismutase activity.

McCarthy, Pat (South Yarra, Aus-

tralia) has started work at the National Herbarium of Victoria in April 1989, as successor of Rex Filson. He will concentrate on microlichens and has started dealing with *Verrucariaceae* and other saxicolous pyrenocarps. His first impressions suggest that the saxicolous pyrenocarp flora of Australia is rich, especially in the more temperate south-eastern states.

Osorio, Héctor (Montevideo, Uruguay) was visited during the first half of this year (1989) by the following colleagues: T. Ahti and S. Stenroos (Helsinki, Cladonia), S. Grundlehner (Lausanne, Usnea). Th. H. Nash, III and C. Gries (Tempe, Xanthoparmelia). In addition to the groups of their particular interest, many other lichens were collected. In East Uruguay, with Th. Nash and his wife, Relicina abstrusa was discovered, a genus not previously known from Uruguay, which constitutes the southernmost record from South America. During May 1989 he and Mariana Fleig from Porto Alegre, Brazil, collected many specimens in the Highlands north of Santa Maria City, as a contribution to their long-term project, a study of the lichen flora of the Highlands from Rio Grande do Sul State, Brazil.

Ryan, Bruce (Tempe, USA) completed his dissertation in May 1989, on "Contributions to the systematics of Lecanora subg. Placodium (lichenized Ascomycotina) in North America" and received a Ph.D. degree in Botany from Arizona State University. He will be staying at A.S.U. at least during August 1989, working with Tom Nash as a research assistant and completing articles for publication. He has considerably more data on lobate species of Lecanoraceae than those included in his dissertation, and will continue working on the group and preparing publications for several years. He is also continuing to work on the preparation of a catalogue of the lichens of Washington State, USA, which he hopes will be ready for publication in a few years.

Seaward, Mark (Bradford, UK), in collaboration with Dr. C. Giacobini (Istituto Centrale del Restauro, Roma), has for several years been researching lichen biodeterioration of ancient monuments and frescos. Recent activities have included fieldwork in and around Rome (see BLS Bulletin 64: 1-7, 1989), and participation in the International Conference on Biodeterioration of Cultural Property held in Lucknow, India in February 1989. He

has also been invited to contribute a paper at a Conference on Oxalate Encrustations to be held in Milan in October 1989.

Sipman, Harrie (Berlin, West Germany) visited Mount Kinabalu Park in Sabah, Malaysia in May 1989. He promised the Park Warden to prepare a list of the lichens of the Park, and would therefore like to contact anyone who collected lichens there. He would like to cooperate with them in preparing the lichen list, and maybe in the identification of collections. He also participated in the Tropical Lichenology Workshop in Puerto Rico. (For a short report on this meeting see the contribution of André Aptroot on p. 59)

Søchting, Ulrik (København, Denmark) spent a second field season on Svalbard (Spitzbergen) in August 1989, studying Arctic Caloplaca. He is also studying Antarctic species, in cooperation with Dag Olav Øvstedal from Bergen, Norway and Maria Olech from Krakow, Poland. Together with Steen N. Christensen, he is investigating the present status of Lobaria pulmonaria and the epiphytic lichen vegetation of beech forests in Denmark. A method for biological monitoring of acid deposition with lichens has been developed and the use of lichens as a tool for estimating nitrogen deposition is now being investigated. In cooperation with Vagn Alstrup, a Red List of Danish lichens has been drawn up and a Danish checklist is in preparation.

News about IMC 4

The Second Circular of the <u>Fourth International Mycological Congress</u>, to be held in Regensburg, Germany (F.R.G.) 28th August - 3rd September 1990, is out! It includes a survey of all symposia, a programme, and a survey of the excursions.

Among the activities of lichenological interest are General Lectures by D.H.S. Richardson and J. Poelt. Symposia with a special significance for lichenologists will include (name of convenor in brackets) in Section A, Systematics and Evolution: Lichen taxonomy and systematics (H. Hertel), Tropical fungi including follicolous lichens (G.J. Samuels), Lichenicolous and fungicolous fungi (D. Hawksworth); in Section B, Morphology and Ulstrastucture: Morphogenesis in Ascomycetes (including lichenized taxa) (R. Honegger); in Section C, Ecology: Distribution of lichenized and non-lichenized fungi in the southern hemisphere (E. Horak, D.J. Galloway), The ecological role of lichens (T.H. Nash).

A special 7-day lichen excursion in Tirol will be led by J. Poelt before the congress.

According to present calculations, fees will be: Full members DM 330, Students DM 100, Accompanying persons DM 100. (Present exchange rate 100 DM = 55 US\$.)

The final Circular, including forms for registration and hotel booking, will be mailed before March 1, 1990.

Award for Wirth's Flechten Baden-Württembergs

On the "Internationale Buchkunstausstellung 1989" ("Best Designed Books Exhibition") in Leipzig (German Democratic Republic) a lichenological publication was honoured. "Die Flechten Baden-Württembergs, Verbreitungsatlas" by Dr. Volkmar Wirth, published by Verlag Eugen Ulmer, Stuttgart (German Federal Republic), was awarded a silver medal. The author and the publisher are to be congratulated on this distinction, seldom achieved by scientific books. It shows that a high

bibliographic standard can match a high scientific standard, for which the book is already famous among lichenologists. The quality of the many colour photographs is outstanding.

V Congreso Latinoamericano de Botanica

The second circular for this Congress, the most important in Latin America, is available. It will be held from 24-29 June 1990 in La Habana, Cuba. The programme features 11 symposia treating many branches of botanical research, poster presentations, general lectures, and satellite meetings of 16 special interest groups, e.g. the Sociedad Latinoamericana de Briología. Opportunities for visits to the major herbaria in La Habana will be provided and 10 excursions of one or more days organized. Special attention to lichens will be paid in session 2, Botánica Sistemática y Evolutiva, coordinator Miguel Rodríguez, Jardin Botanico Nacional, Ciudad de La Habana. Further activities of special interest to lichenologists may include the 2. Simposio Latinoamericano de Briología and Mesa Redonda Nr. 2, Floras of the Gondwanic Continents. Registration before 31 January 1990, fee US\$ 140 (\$120 for members of Asociación Latinoamericana de Botánica, \$80 for students and \$60 for accompanying members).

Correspondence:

V Congreso Latinoamericano de Botánica, Palacio de las Convenciones, Apartado Postal 16046, Ciudad de La Habana, Cuba. Tel. 225511 to 19, Telex 511609 palco cu, FAX 22 83 82

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V Congreso Latinoamericano de Botánica, Instituto de Ecología y Sistemática, ACC, Carretera de Varona km 3 1/2, Capdevila, Boyeros, Ciudad de La Habana, Cuba. Apartado Postal 8010, Código Postal 10800. Tel. 446927 and 446920. Telex 511290 CUBACAD

Rare Lichens Project in the USA and Canada

A project to determine the conservation status of the lichens of North America north of Mexico, and Hawaii was recently begun by Mason E. Hale, Jr., and Sherry K. Pittam of the Department of Botany, Smithsonian Institution, in cooperation with The Nature Conservancy.

The project's goal is to generate a list of rare or endangered lichens with the necessary information to seek protection for species as appropriate, and to provide

this information to the Conservancy and to other conservation organizations and land-management agencies. When possible, potential threats to individual species, as well as geographic distribution and abundance, will be noted. Taxonomy will follow Egan's checklist (as revised).

Those interested are invited to provide names of potentially rare or endangered species of lichens, with available supporting information. Please send them to Sherry K. Pittam, Rare Lichens Project, Smithsonian, Botany/NHB 166, Washington, D.C. 20560, USA, tel. (202) 357-2545.

Flora Neotropica - Lichens Progress Report September 1989

The Organization for FLORA NEOTROPICA (OFN) is a non-profit making organization set up by the Commission of UNESCO in 1964 to publish a complete flora of the tropical American region, i.e. of the area bounded to the north by the Tropic of Cancer and to the south by the Tropic of Capricorn. It fosters the use of the services and skills of specialized botanists and the cooperation of botanical institutions throughout the world. About 50 volumes have now been published, most of them on angiosperms, and many more are in preparation. Contributions are prepared according to a detailed set of guidelines, which can be obtained from the Deputy Director of Cryptogams, Dr. S. Rob Gradstein (address see below), of from the Managing Editor of Flora Neotropica, Dr. Maria Lebron-Luteyn, The New York Botanical Garden, Bronx, N.Y. 10458-5126, U.S.A.

Colleagues wishing to contribute a monograph on neotropical lichens to the FLORA NEOTROPICA should write to S. Rob Gradstein, Deputy Director OFN, institute of Systematic Botany, Heidelberglaan 2, 3584 CS Utrecht, The Netherlands.

Lichen treatments have not yet been published, but at least two monographs are nearing completion (Brako, *Phyllopsora*; Ahti, *Cladoniaceae*) and several are in preparation. The list of lichen monographs currently in preparation for FLORA NEOTROPICA is as follows (species numbers given are approximations):

Bacidiaceae

Phyllopsora (20 spp.)	L. Brako (MO) 1989)
Baeomycetaceae	H.J. Sipman (B)	
Cladoniaceae (130 spp.)	T. Ahti (H) 1990).
Collemataceae		
Lentogium azureum group (20 spp.)	M. Lindstrom (GB)	

Parmeliaceae (c. 400 spp.)	M. Hale (US)
Peltigeraceae	
Peltigera (25 spp.)	O. Vitikainen (H) 1990
Physciaceae pr. p.	R. Moberg (UPS)
Pyrenulaceae	A. Aptroot (U) 1992
Ramalinaceae	H. Kashiwadani (TNS)
Stereocaulaceae (25 spp.)	H.J. Sipman (B)
Thelotremataceae (200 spp.)	M. Hale (US)
Trypetheliaceae (150 spp.)	ssayet, R. Harris (NY) a najihasa sang estibe y
Usneaceae (50 spp.)	P. Clerc et al. (BERN)

A Round-the-World Field Trip

With today's frequent air connections available all over the world, lichen collecting in the tropics has much increased. However, much of the collecting done seems to be rather general, with emphasis on macrolichens. Most crustose groups, like the pyrenocarpous lichens, still tend to be neglected, and are not yet becoming available to specialists on a large scale. It was therefore considered important to carry out specialist collecting in the tropics for my PhD project on the taxonomy and phylogeny of part of the *Pyrenulaceae*. Fortunately many of the relevant lichens grow in coastal habitats, for instance mangroves and palm beaches. Therefore, the planned field trip did not need to include time-consuming Livingstone-type expeditions to the interior of some uninhabited areas. Instead, one round-the-world trip, during which several different countries could be briefly visited, seemed to be the most effective. The trip was carried out May-July 1989, with my wife as my only company during most of the trip.

To start with, we participated in the workshop 'Tropical Lichenology' in Puerto Rico (see announcement in ILN 22: 6). This was a very fruitful experience due to the unique combination of a convenient field station with excellent lichen flora nearby, in the mountain forests near Maricao. The possibility to examine freshly collected material immediately was very valuable, and brought interesting observations on characters like hamathecium inspersion. Among the collected lichens was the rare Lithothelium cubanum and many undescribed species. Various other localities all over Puerto Rico were visited during the workshop, varying from dry coastal scrub with many Lichinaceae and Heppiaceae on the rocks and soil to submontane forest with Sticta and Dictyonema.

Our next stop was southern Florida, where collecting was done mainly in populated areas like Homestead. In addition the Everglades and the Keys were visited. An

important aim in Florida was to gather fresh material from several selected species for cultivation of the mycobiont. The cultures will be included in the collections of the Centraalbureau voor Schimmelcultures, Baarn, Netherlands.

In the Hawaiian archipelago we visited two islands, viz. Oahu and Hawaii. Emphasis was laid on the collection of possible endemics. Some shaded rock outcrops on Oahu proved to be surprisingly rich, and yielded several weird *Porinae*. On Hawaii the influence of a natural source of air pollution in the form of a recent lava flow on the lichen vegetation at the SE coast was seen. All pyrenocarps were heavily affected unlike some other lichen species.

In Singapore the last remaining primary rain forest reserves were visited. As expected these forests were not very rich in pyrenocarps. Some other areas however, especially on St. John's Island off the coast were particularly rich.

As the last country, we visited the Maledives, from which I had never seen any lichen specimen or any reference to lichens before. Thus any lichen found was bound to be a new record. Fortunately, one of the three islands visited (Velassaru) was fairly rich in lichens. The number of lichen species even appeared to exceed that of phanerogams. Most lichens grew on the palm trees, many belonging to species with a pantropical distribution.

In total, over 700 specimens were collected, mainly pyrenocarpous lichens, belonging to some 200 species, and some 30 living collections. Many of these will be treated in my future work on pyrenocarps. Apart from this, separate publications on our observations on Hawaii and the Maledives are planned.

---A. Aptroot

New Literature

Reino ALAVA. 1988. Edvard August Vainio's Types in Tur-V and other herbaria. Publications from the Herbarium, University of Turku, 2. 513 pp. Price FIM 100. (a list of all collections cited in the original descriptions of new lichen taxa by Vainio, arranged by taxa, with indications which material is present in the Vainio herbarium in Turku or elsewhere; recent type designations are often indicated)

Rita KETNER-OOSTRA. 1989. Lichenen en mossen in de duinen van Terschelling. Rijksinstituut voor Natuurbeheer Rapport 89/7. 157 pp. Available from: Rijksinstituut voor Natuurbeheer, Kasteel Broekhuizen, Leersum, The Netherlands. (Summary of a study made 1965-1972 of ecology and syntaxonomy of open lichen-rich vegetations on acid coastal sanddunes on the island of Terschelling, The Netherlands; in Dutch)

PERSONALIA

Vernon AHMADJIAN

Vernon Ahmadjian has been elected President-elect of the American Bryological and Lichenological Society.

Stanley Wilson GREENE

The well-known bryologist Stanley W. Greene died on June 14, 1989, at the age of 61. He played an important role in several international bryological and taxonomical organizations. His "Bryological Times" is among the most successful scientific newsletters. He also had an interest in lichens and was a member of IAL.

Changes/Corrections of address

James W. CASE, c/o Case Biomanagement, 1165, 605-5th Avenue S.W., Calgary, Alberta T2P 3H5, Canada

Paul DIEDERICH, 5 rue Fernand-Mertens, L-2148 Luxembourg, G.-D. de Luxembourg

David W. GOODALL, Western Australian Laboratory, Locked Bag No. 4, Midland, W.A. 6056, Australia

Patrick M. MacCARTHY, Royal Botanic Garden and National Herbarium, Birdwood Avenue, South Yarra, Victoria 3141, Australia

Ivan PISUT, UEBE SAV, odd geobotaniky, Sienkiewiezova 1, 81434 Bratislava, Czechoslovakia

Thomas VERHEYEN, Lippeweg 7, D-4440 Rheine 1, West Germany

New Members

Pieter v.d. BOOM, Aziëlaan 12, NL-5691 LC Son, Netherlands Maarten BRAND, Klipperwerf 5, NL-2713 DX Leiden, Netherlands Andrea GARGAS, Department of Botany, University of California, Berkeley, CA 94720, USA

Pat WOLSELEY, Nettlecombe Studios, Williton, Taunton, Somerset TA4 4HS, UK.

Back issues of ILN

The following back issues of ILN are still available: 9(1), 9(2), 10(1), 10(2), 11(1), 11(2), 12(1), 12(2), 13(1), 13(2), 14(1), 14(2), 15(1), 15(2), 16(1), 16(2), 17(1), 20(1), 20(2), 20(3), 21(1), 21(2), 21(3). In photocopy available are: vol. 1 (1), 1(2+supp.), 1(3), 2(1), 3(2), 6(2), 7(1-2), 8(1-2). Two indexes are also available: Index to vol. 1-8, Index to vol. 9-13.

According to a resolution of the IAL Executive Council, published in ILN 16 (1), April 1983, the following charges will be levied for back issues of ILN: Vol. 1: US\$ 0.25 per number (3 per volume); vol. 2-8: US\$ 0.50 per number (2 per volume); vol. 9-13: US\$ 1.00 per number (2 per volume); vol. 14-17: US\$ 1.50 per number (2 per volume).

Back issues from vol. 20 onward are available for US\$ 1.00 per number (3 per volume). The Indexes are free.

New members will receive free only copies of the numbers constituting the volume issued for the calendar year in which they join IAL.

Orders to be sent to H. Sipman, Bot. Garten & Bot. Museum, Königin-Luise-Strasse 6-8, D-1 Berlin 33, Germany (FRG).

LIST OF SOCIETIES

Australasia: Society of Australasian Lichenologists (SAL). Info: Dr. J. A. Elix, Dept. of Chemistry, The Australian National University, GPO Box 4, Canberra ACT 2601, Australia.

Central Europe: <u>Bryologisch-Lichenologische Arbeitsgemeinschaft für Mitteleuropa</u> (<u>BLAM</u>). Info: Dr. G. Philippi, Landessammlungen für Naturkunde, Erbprinzenstrasse 3, Postfach 3949, D-7500 Karlsruhe 1, Western Germany (FRG)

Czechoslovakia: <u>Bryological and Lichenological Section of the Czechoslovak Botanical Society.</u> Info: Dr. I. Novotny, Botanické odd. Moravského muzea, Preslova 1, CS-60200 Brno, Czechoslovakia.

France: <u>Association Française de Lichénologie (AFL)</u>. Info: Dr. Richard Lallement, Université de Nantes, Laboratoire de Biologie et Cytophysiologie Végétales, 2 Rue de la Houssinière, F-44072 Nantes Cedex, France.

Great Britain: British Lichen Society (BLS). Info: Secretary of the British Lichen Society, Botany Department, British Museum

(Natural History), Cromwell Road, London SW7 5BD, UK.

Italy: Societa' Lichenologica Italiana (SLI). Info: Secretary, Prof. Giovanni Caniglia, Dipartimento di Biologia, Via Orto Botanico 15, I-35123 Padova, Italia.

Japan: <u>Lichenological Society of Japan (LSJ)</u>. Info: Dr. H. Kashiwadani, National Science Museum, Division of Cryptogams, Hyakunin-cho 3-23-1, Shinjuku-ku, Tokyo, Japan.

Netherlands: <u>Bryologische en Lichenologische Werkgroep der KNNV (BLW)</u>. Info: P. Hovekamp, Eiberoord 3, NL-2317 XL Leiden, The Netherlands.

Nordic Countries: <u>Nordisk Lichenologisk Forening (NLF)</u>. Info: Ulrik Søchting, Institut for Sporeplanter, Ø. Farimagsgade 2 D, DK-1353 København K, Denmark.

Poland: <u>Lichenological Section</u> of the <u>Polish Botanical Society</u> (Polskie Towarzystwo Botaniczne). Secretary: Dr. W. Faltynowicz, Department of Plant Ecology, University of Gdansk, ul. Czolgistow

46, 81-378 Gdynia, Poland.

Switzerland: Schweizerische Vereinigung für Bryologie und Lichenologie (SVBL). Info: K. Ammann, Systematisch-Geobotanisches Institut der Universität Bern, Altenbergrain 21, CH-3013 Bern, Switzerland.

USA: American Bryological and Lichenological Society (ABLS). Info: Dale M.J. Mueller, Dept. of Botany, Texas A & M University, College Station, Tx 77843-3258, USA.