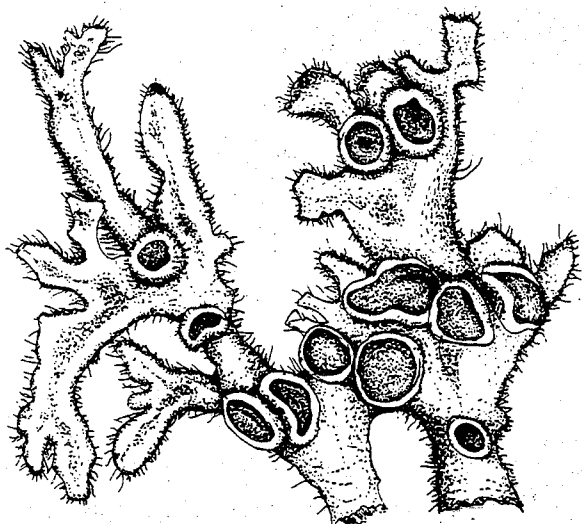


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or (for british members) to: T.H. Moxham, Mayfair House, 21 Ashgrove, Peasedown St. John, Bath, Avon, BA2 8EB, U.K. (subscription price £13.00)

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RESEARCH NEWS & NOTES

Abdel Bari, E.M.M. (Khartoum, Sudan) intends to prepare a survey of the lichen flora of Sudan, starting with a PhD project. Sudan is a large country with a wide range of habitats, from desert to gallery forest. However, nothing seems to be known about its lichen flora, and he has to start with nothing, no literature nor reference material. Therefore he would like to come into contact with people who can support him with lichen reports of his country, relevant literature or reference material. In return he is willing to offer lichens from Sudan on an exchange basis.

Biazrov, Lev (Moscow, Russia) thanks to financial support of the International Scientific Foundation (travel grant 1451-2) participated in the 1st International Symposium on Ecosystem Health and Medicine, June 18-23, in Ottawa, Canada, where he gave a presentation "Lichens as Indicators of Ecosystem Health". He also contacted Irwin M. Brodo, Botany Division, Canadian Museum of Nature. From June 24 to July 10, he visited the University of Maine in Orono, USA, by invitation of the US Fish and Wildlife Service. Here he participated in a seminar on Environmental Pollution organized by Bruce Wiersma and Katherine L. Weber of the College of Natural Resources, Forestry and Agriculture. Also he had meetings and discussions with Richard Homala, Connie Stubs

and other professors and scientists of the University of Maine.

Bültmann, Helga (Münster, Germany) started investigations for a PhD thesis on the relationships between lichen diversity, strategies, biomass and habitat selection in terricolous lichen vegetation on acid soil. This project is financially supported by the Deutsche Forschungsgemeinschaft for two years (grant to **Fred Daniëls**). Field work will be carried out in Greenland (1995), Southern Finland (1994), North Denmark (Jutland, 1994) and Germany (Lüneburger Heide, 1995).

Cogt, Ulzijn (Ulaanbataar, Mongolia) spent three months in Berlin from October to December 1993, working in the lichen herbarium and the library of the Botanical Garden and Museum in Berlin-Dahlem. During his stay he enjoyed the opportunity to meet W. Lack, Ch. Leuckert, G. B. Feige, H. Hertel, Dr. S. Huneck, H. Sipman, T. Lumbsch, J. Knoph. Also he completed a manuscript "The Lichens of Mongolia", which was accepted for publication in *Willdenowia*. It includes 53 families, 175 genera and 928 species. He took 80 duplicates from Dr. S. Huneck's Mongolian lichen collection, which will be kept in his Institute's Lichen Herbarium as reference material.

Feige, Benno (Essen, Germany) re-

ports that some students started with lichen projects at his department. Roland Anderley will study the genus *Diploschistes* in South Africa and Anja Krapp the developmental morphology of the ascomata in *Bryonora* and *Protoparmelia*. Both studies are "Staatsexamensarbeiten". A further study on the chemistry of Mediterranean *Squamarina* species is planned. Beate Job is carrying out a "Diplomarbeit" on the sociology of lichens on lead dumps in the Eifel Mts. Andreas Dickhäuser is compiling a synopsis of the *Lecanora subcarnea* complex. Any comments or material for any of these projects is most welcomed.

Follmann, Gerhard (Cologne, Germany) made a field trip to the Galápagos Islands in February and March of 1994, in which he was assisted by **Birgit Werner** of his geobotanical team. This new expedition became desirable because - contrary to former assumptions - preliminary examinations with improved methods resulted in the elucidation of strong modifications and variations within certain taxa on single islands, possibly explainable by adaptive radiation. The *Roccella galapagoensis* complex of the *R. portentosa* group represents a typical example of such relatively recent splitting, where actually seven schizoenemics with different chemistry, morphology, and distribution can be distinguished. Besides numerous new lichen collections, first sociological inventories of lichen associations in the various vegetation belts were made. An overview of the first results will be published in a special volume on the flora and fauna of the Galápagos Is-

lands to be issued by the "Palmen-garten" (Frankfurt) this winter, and a detailed systematical treatment of the *Roccella portentosa* group on the Galápagos Islands is now being prepared together with **Lázaro Sánchez-Pinto** (Museo de Ciencias Naturales, Santa Cruz de Tenerife) for the TFMC Series "Resultados científicos del proyecto Galápagos" (Santa Cruz de Tenerife), scheduled for 1995.

Kirschbaum, U. (Giessen, Germany) and his collaborators finished a lichen mapping project of the state of Hesse (Central part of Germany) in relation with air quality assessment in 1990-1993, upon request of the Hessische Landesanstalt für Umwelt (HLfU). Following the new VDI directives some 3500 localities, equally distributed over the state, with about 30,000 free-standing deciduous trees, were investigated. Over 100 lichen species were found and their frequency measured. It concerns the first complete mapping of a German state, and the first using the new directives. The result will be published in a 100 page report with distribution maps of the observed lichen species. This is scheduled to appear in the second half of this year and will be available from the HLfU: Hessische Landesanstalt f. Umwelt, Unter den Eichen 7, Postfach 3209, D-65195 Wiesbaden.

Kondratyuk, Sergey (Kiev, Ukraine) carried out a lichen mapping project in Chernigiv town, NE Ukraine, in April 1994, together with post-graduate students **Sergey D. Zelenko** and **Alexander Y. Khodosovtsev**. Descriptions were made of the epiphytic lichen

communities, and exsiccata material collected from some new and rare species, a.o. *Xanthoria fulva*, *Caloplaca chlorina*. In June 1994 he made a long expedition to collect lichens and lichenicolous fungi in the reserve "Medobory" (Ternopil' region of the Ukraine), together with the mycologist **Ivanna V. Kolomiets**. They would like to express their deep thanks to **Galina I. Oliyar** and **Stephan A. Storozhuk** and all staff of the Reserve for excellent arrangement of the expedition, warm hospitality and kind help. Thanks to the generous help of **Dr. David J. Galloway** he will be in BM until November 1994.

Schlechter, Elisabeth (Cologne, Germany) successfully defended her PhD thesis entitled "Distribution atlas of the macrolichens of the Eifel Mountains and adjacent regions, West Germany", prepared under the guidance of **Gerhard Follmann** (Botanical Institute, University of Cologne). It is based on seven years of intensive lichen collecting and mapping, and contains the first complete documentation and solid revision of the macrolichens of this part of the Rhenanian Slate Plateau. Ecological and sociological data

as well as descriptions of typical lichen habitats of the multifarious medium altitude region are also included. About 200 differentiated grid maps and notes on many more taxa point to considerable floristic changes during the past decades and to the fact, that the Central European lichen flora is still far from being well-known. Voucher specimens of the material used are deposited at KOELN, and it is hoped that a slightly abridged version of the atlas will be published in the near future.

Thor, Göran (Uppsala, Sweden) has received a fellowship from the Japan Society for the Promotion of Science (JSPS). He is spending one year from 1 May 1994 with **Dr. H. Kashiwadani** at the National Science Museum in Tsukuba, Japan. He will be mainly working with the taxonomy of *Chiodecton* s.lat., *Cryptothecia* s.lat., *Enterographa*, *Mazosia*, *Sclerophyton*, *Stirtonia*, and some other genera of Arthoniales. The aim is to discern monophyletic groups and to clarify the phylogeny between these groups. He will also travel around Japan, both for field work and to visit different institutions and lichenologists.

Minutes of the general meeting of the IAL, Vancouver, August 19, 1994

1. Opening with appr. 70 members present. Apologies for absence received from Elix, Seaward and Smith.
2. Minutes of the general meeting in Yokohama accepted without comments.
3. Financial situation. At the moment available: DM 3500 + \$ 2000, which will cover the normal expenses until 1996. More than 200 members have not yet paid, but Lumbsch has no recent information from Moxham and Smith regarding fees collected by them.
The meeting accepted a raise in dues to DM 30 or \$ 20 for a two-year period, starting 1996.
Seppelt suggested distribution of the IAL Newsletter separately within each continent; Rosentreter to send it by E-mail. Thomson suggested printing the expiry date on the address labels. Hawksworth suggested asking national societies for substantial dues. This additional money would cover the expenses of officials extending international meetings.
4. Future IAL activities are briefly outlined.
1995 Symposium on foliicolous cryptogams in Hungary, with probably a field meeting in Rumania afterwards.
1996 IAL 3 congress in Salzburg, 1-7 September. Topics will include lichenicolous fungi, lichen cultures, tropical lichens and pyrenocarpous lichens. Four excursions will be organized.
1997 Possibly an excursion to Brazil.
1998 IMC 6 in Jerusalem. Galun asks for suggestions.
5. Other business: The IAL will participate in the International Forum on Biodiversity in September in Paris. Armaleo is still in search of a model lichen species. Scheidegger is elected as member of the IAL commission on the protection of lichens.
6. The Hale Award is presented to Valladares. Four Acharius medals are presented to Brodo, Galun, Kurokawa and Tschermak-Woess.
7. Closing and start of the traditional IAL dinner.

André Aptroot

The presentation of the Acharius medals and Hale award in Vancouver, 19 August 1994

Prof. Dr. Elisabeth Tschermak-Woess

It is a great pleasure and honour for me to support the award of the Acharius Medal to Professor Elisabeth Tschermak-Woess. There is no question that she deserves this honour, particularly when one considers that she is not really a lichenologist at all. Elisabeth Tschermak-Woess started her scientific career with work on algae, while many of her later publications concern cytological problems in higher plants. She demonstrated, for example, the presence of structural heterozygosity to a

surprising extent in natural *Allium* populations. Together with her co-workers she described the occurrence of polytene chromosomes in plants for the first time. To that date such "giant" chromosomes were believed to occur in animals only.

When she started on this cytological work after the war she had already published papers on the systematics and reproduction of algae and later she returned to this field. The photobionts of lichens are largely ignored by lichenologists or, at best, a typical lichenologist knows four or five different types of algae and the names of these genera are used for anything observed in the thallus. In contrast to this rather superficial classification Elisabeth Tschermak-Woess isolated and cultured all the different photobionts with great care and reported on their diversity in lichens. She was the first to discover a member of the Xanthophyceae in lichens and was able to demonstrate a symbiotic contact of a mycobiont with *Chlorella*. She described numerous additional genera as photobionts and her work really needs to be recommended and is to be highly appreciated for this treatment of the algae.

One of the well-known problems in lichen reproduction is the relichenization of fungi with *Trebouxia*. Elisabeth Tschermak-Woess was able to show that these algae may be rare in an unlichenized state but that free-living *Trebouxia* do occur. Perhaps even more important to lichenology were her investigations on the contacts between algae and fungi in lichens. Only in recent years this aspect of symbiosis has been fully appreciated by lichenologists and many of the recent publications omit to acknowledge the fact that the basic observations have been made by her. Her exact descriptions of the different types of haustoria were certainly key discoveries in this field. She demonstrated the difference between intracellular and intramembranaceous haustoria and recognized intracellular haustoria as phylogenetically primitive. The taxonomic relevance of haustoria and the influence of exogenous factors on contact between the bionts were described by her for the first time. The most important results in this field were published as early as 1941 in her dissertation. With the light microscope she observed nearly all the details which were confirmed later with the electron microscope.

Elisabeth Tschermak-Woess has published more than one hundred scientific papers. For many years she has been in charge of the reviews on morphology and development of the cell published in "Progress in Botany". But it is not only the number and quality of these publications, it is above all the broad range of her scientific research that is so impressive.

I have only met Elisabeth Tschermak-Woess twice at congresses but she impressed me very much by her friendly and warm-hearted manner. I would very much like to get to know her better. Perhaps that will still be possible as she is still scientifically active, even though she is now 77 years old. It would have been nice to present her personally with this medal today. Hopefully all of us will be able to give her our personal and cordial congratulations at the next IAL meeting in two years when it will be held in Salzburg.

Sieglinde Ott

Margalith Galun

I am very sad not to be able to be with you all today, but I am delighted that one of my closest friends, David Richardson, is able to take my place in perform-

ing what is a most pleasurable task, namely that of proposing another of my dear friends, Margalith Galun, for the Acharius Medal.

Margalith Galun will be well known to all those present here today for her research into lichen symbiosis, the results of which have been a major feature of international conferences and journals over the years. As well as a considerable output of scientific papers and the editorship of *Symbiosis*, an international journal she was responsible for establishing in 1985, Margalith took on the onerous task of editing the *Handbook of Lichenology* for CRC Press. According to her husband, Esra, Margalith likes challenges, and this proved to be just that: I am personally aware of the hard work she put into this project, particularly when she found herself in the position of having to omit certain chapters, or write them herself, when a number of would-be contributors failed to honour their promises.

Margalith has worked tirelessly for the IAL, being a firm believer in the importance of international co-operation; not only has she attended many of its meetings, but she has also been an active member of its committee, serving as Vice-President from 1987 to 1993 and organizing the successful International Symbiosis Congress in Jerusalem in November 1991. The imposition of political and financial constraints have often put difficulties in Margalith's way, but she has surmounted such problems, frequently at considerable self-sacrifice, with the result that Tel-Aviv is internationally acclaimed as a centre of excellence for the study of lichens. The outstanding success of Margalith's many research students testifies to her inspirational guidance. In addition to all her lichenological activities, Margalith shoulders a heavy burden of administrative duties arising from senior academic positions held at the University of Tel-Aviv.

Margalith and I have been friends for many years and we have spent many happy and profitable times together; the time I spent with her in Israel in 1976 was an experience I shall never forget, and I know that many other lichenologists have similar fond memories of her warm hospitality and unquenchable enthusiasm for lichenology.

Margalith is unquestionably one of the world's foremost lichenologists and is undoubtedly deserving of the Acharius Medal.

Shalom oo-veracha, Margalith

Mark Scaward

Dr. Syo Kurokawa

Dr. Syo Kurokawa was born in Toyama, Japan in 1926. He studied botany at the Tokyo University of Literature and Science, which granted him a PhD degree in 1961. In 1954 he became a researcher at the Research Institute of Natural Resources, of which the late Dr. Yasuhiko Asahina was director at that time. From 1962 he was a curator at the Division of Cryptogams, National Science Museum, Tokyo. In 1969 he was appointed as senior curator of the same division, and in 1974 as Director of the Botany Department. From 1983 to 1991 he was director of the Tsukuba Botanical Garden, a part of the National Science Museum. After his retirement from the National Science Museum he has served as director of the Botanical Garden of Toyama.

Dr. Kurokawa has been interested in lichens worldwide, and over the past 40 years has published many papers and monographs. The first paper was published

together with Dr. Y. Asahina in 1952. Dr. Kurokawa is a particularly outstanding person among the many excellent lichenologists who have rendered contributions to the taxonomy of *Anaptychia* and *Parmelia*. He published a world monograph of the genus *Anaptychia* in 1962, proposed a new taxonomic system of *Parmelia* sens. lat. with the late Dr. Mason E. Hale in 1964, and described many new species of *Parmelia*. Dr. Kurokawa has built up a lichen herbarium at the National Science Museum, Tokyo, which is now among the largest and best preserved herbaria in the world. He has made many lichenological field trips not only in Japan but also in many places over the world, i.e. North America, Brazil, Papua New Guinea, Australia, Thailand, Formosa, etc. He published an excellent exsiccata series from the National Science Museum, which includes 700 numbers. Dr. Kurokawa has encouraged many students in Japan. In 1972 he established the Lichenological Society of Japan for the promotion of lichen research and the distribution of valuable lichenological publications. On behalf of the Japanese lichenologists and as a colleague, I would like to offer Dr. Kurokawa words of admiration for an Acharius medalist. It is sincerely hoped that Dr. Kurokawa will continue to play an active role in lichenology in the coming years.

H. Kashiwadani

Irwin M. Brodo

Last but no means least, as Brian Coppins said when he introduced Peter James two years ago, which is indeed also true for this fourth candidate. Born in the US 1935, a New Yorker he, studied at Columbia University and Cornell University in Ithaca, where he received his masters degree. He then went on to Michigan State University in 1959 to work on a Ph.D. in lichenology with Henry Imshaug. It is probably clear to most of you that I am talking about Ernie Brodo or Irwin M. Brodo, as official letters are usually signed. Since 1965 Ernie has been employed at the National Museum of Canada in Ottawa as curator of the lichen collections, which he indeed has kept very well, having worked there and seen the well organized collections myself in the summer of 1976.

Ernie has a very broad knowledge of lichenology and he has published extensively on various fields such as lichen chemistry, systematics, air pollution and more popular articles on general lichenology. Some of his publications are well known in the lichenological literature: his printed doctoral thesis *The Lichens of Long Island, New York*, a vegetational and floristic analysis from 1968; *Alectoria and allied genera in North America* from 1977 together with David Hawksworth and a splendid monographic treatment of the alectorioid lichens and something of a model for many modern monographic treatments to be published in the next years to come; *Lichens of the Ottawa Region* published in two editions 1981 and 1988 and papers like *The North American species of the *Lecanora subfusca* group* published in 1984.

Apart from scientific papers, Ernie also had time to publish numerous editorial notes during the exciting time when the IAL Newsletter started from 1967 through 1981, first as co-editor until 1975 and then as editor for a second term until Martin Dibben took over the editorship after the Sidney Congress.

His main interest, however, falls within the field of floristics and systematics of

Canadian lichens, where he has published on many difficult groups such as *Cocotrema*, *Ochrolechia*, *Rhizocarpon* and *Haematomma*. In connection with this interest, he has also distributed his *Lichenes Canadenses Exsiccati* in several fascicles attached by very detailed publications. Ernie once told me that he could travel almost anywhere with support of the government, but only in Canada. But Canada is a large country, mainly covered by taiga and arctic tundra rich in lichen communities. His lichenological Shangri La is located there on the Pacific West coast, in the remote archipelago of the Queen Charlotte Islands. There he has found most of his exciting discoveries hidden in dense coniferous forests and soaked by oceanic mists. On every occasion I have met with Ernie I have heard about this place, always. In 1972 when I first met him, he proudly showed his Queen Charlotte room all filled with specimens and collections from floor to ceiling. Now, after his recent sabbatical in Finland and Sweden, we all hope to see this work, which he has devoted so much of his time over more than two decades, completed soon. I know, however, that another more time-consuming project, a field guide of North American lichens, has slipped through in his tight agenda. This will of course also be a welcome book.

Ernie Brodo is congratulated by the IAL council for what he has achieved on the systematics of lichens on the North American continent.

Ingvar Kärnefelt

Mason E. Hale Award to Fernando Valladares Ros

We had several strong candidates for the Mason E. Hale Award this year, i.e. the award for an outstanding doctoral thesis presented by a candidate on a lichenological theme. After an inquiry among the IAL council members the choice stood between two candidates. However, we can only have one winner, and the winner this time is Fernando Valladares Ros of the Universidad Complutense de Madrid, Facultad de Ciencias Biológicas. The title of his splendid thesis is "Estructura y propiedades físicas del talo líquénico en la familia Umbilicariaceae". The 300+ page work deals basically with a description of the functional ultrastructure of the different bionts in a large number of representative species within the family Umbilicariaceae. Parts of the results based on the thesis have already been published in the American Journal of Botany, Cryptogamie, Lichenologist and Symbiosis. Several other articles are under press in Canadian Journal of Botany, Annals of Botany and Cryptogamie also together with Fernando's supervisors Carmen Ascaso and Leopoldo Sancho.

Ingvar Kärnefelt

IMC5 in Vancouver, August 1994

Nature was a gracious hostess this summer in Vancouver, B.C., at the Fifth International Mycological Congress. The IAL met concurrently with the IMC where, as in Camelot, it rained only at night. Gentle breezes refreshed us on our walks to and from sessions across the UBC campus, and those of us who made it to the beach found comfortable water temperatures and magnificent views of nearby

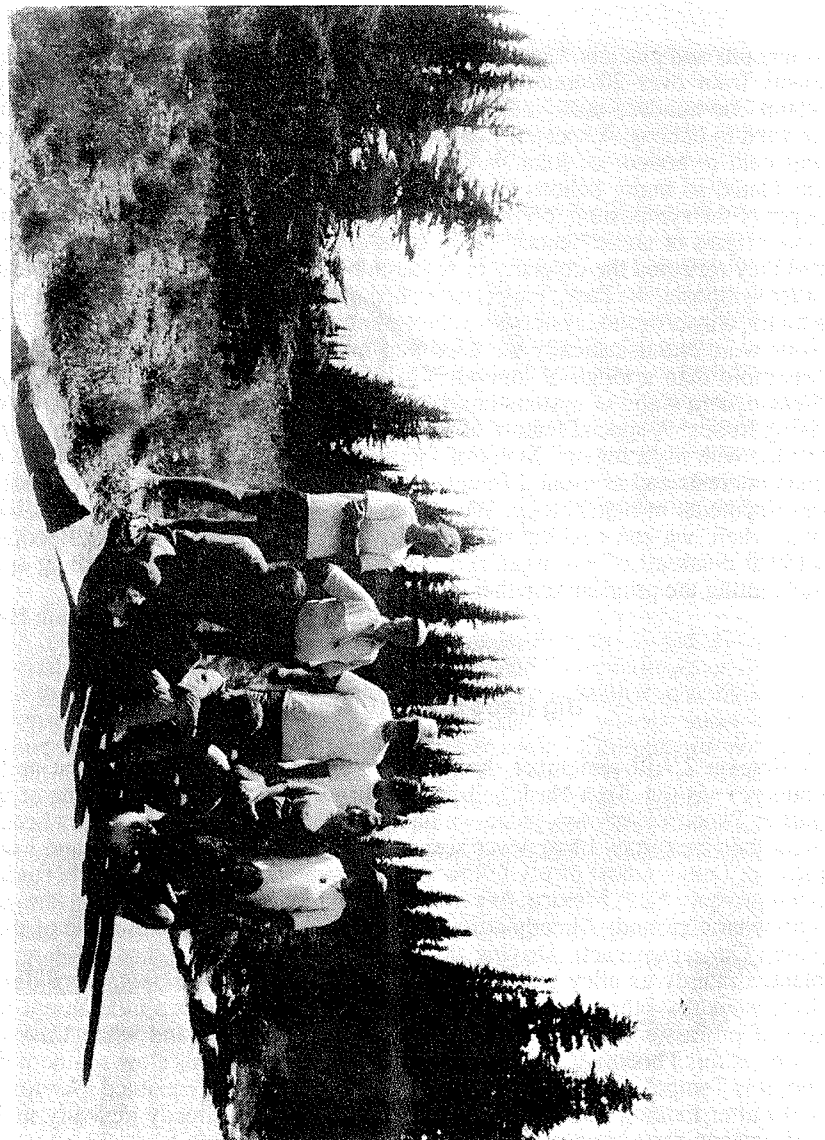
mountains and glaciers. Lichenologists were well represented at IMC5, with participants from over 20 countries. There was something lichenological every day. About one hundred talks and posters on lichens were presented, with 7 symposia devoted to lichens. A special, two-part symposium on alpine and polar lichenology was held in honour of John W. Thomson, whose long and productive career has elucidated so many lichens from boreal regions. Dr. Thomson delivered the first paper of the symposium, offering a stimulating biogeographical account of the possible origins of arctic lichens. Other talks covered both boreal and austral regions, and they reflected the diversity of research being conducted worldwide. During the other symposia, we heard papers on lichen symbioses, molecular and cellular interactions, conservation, systematics, biotechnology, and foliicolous lichens. The sessions were enthusiastically attended and much new material was covered. There was more than a touch of humour when Ingvar Kärnefelt threatened to wave his *Metasequoia* wand at systematics who spoke overtime, confirming that they were living fossils! A special feature of the meeting was the opportunity for plenty of interface with mycologists. Many of the mycological talks were pertinent to our lichen interests and as usual, I found our mycological colleagues to be curious about developments in lichenology. We all look forward to more opportunities like this one, where we can develop our scholarly symbiosis with the fungus people. We wish to thank all of the organizers, who did an excellent job contacting speakers and putting the program together.

Sam Hammer

Big trees and a universe of trees

Forever I will remember the summer of 1994, a summer as great as the far country I visited. Tom Nash had waited for me already for a long time at the airport in Phoenix, Arizona, since we had been delayed for several hours because of great thunderstorms. I had never seen such gigantic lightning before and I was impressed. Less so most of my fellow passengers, all pale by the horrible flight from Albuquerque, New Mexico. We were all glad to get down safely on the ground. And what a ground! Already at the airport I met for the first time some of these gigantic *Carnegiea* cacti. Driving down to Tempe I also watched the large palms planted mainly as alley trees, most of them obviously *Washingtonia filifera*. But there were also other, introduced species. Tom is sometimes a little absent-minded sort of professor being elsewhere than within a dialogue and when I asked him, "Tom, is this Phoenix?", he answered me after a while in his slow southern dialect, "no, it is Tempe". I was of course thinking of the frequently planted *Phoenix dactylifera* after looking through the window, but Tom was already mentally in Tempe and Arizona State University working on his poster for IMC5.

We left Tempe early on Saturday morning, July 30, driving through a part of the Colorado Desert to southern California. And desert country it was, dry and hot, but for a botanist teacher still interesting with *Carnegiea gigantea* and large Joshua trees, *Yucca brevifolia*. The trip was then basically a drive through the very scenic inland mountain ranges, or partly along the splendid coast north of San Francisco



Photograph: Members of the Tempe-Vancouver excursion on Mt. Rainier. Front row from right: Tom Nash with Kimberly and Corinna Nash, Janet Marsh with daughter Paloma; back row Kärnefelt, Bill Davies, Dennis Cook, Thorsten Lumbsch, Cherry Whity and Beth Kantrud.

up to Vancouver. It was here I met the Giant Sequoias, *Sequoiadendron giganteum*, in the Sierra Nevada and Sequoia National Park, standing as living landmarks of past times, some of them over 250 ft high and with a basal diameter of 30 ft. It is hard to believe that we also had such magnificent forests of these trees in Europe in the Tertiary era. The mighty Sherman tree presumably has not changed much since the famous civil war general died over a century ago. We saw many other big trees through most of the field trip, the Coastal Redwood, *Sequoia sempervirens*, the Western Red Cedar, *Thuja plicata*, and the mighty Douglas-Fir, *Pseudotsuga menziesii*.

The lichen vegetation was locally very spectacular both in the individual size and also in abundance, such as the *Ramalina menziesii* community along the scenic Oregon coast and some of the alveoloid communities in Mt. Hood National Forest. We camped there near the pretty little Monon Lake in a forest dominated by *Picea engelmannii*, almost covered by large and beautifully fertile *Alectoria lata* and *A. sarmentosa*. I also met with some of my old acquaintances again, the western north American subalpine species now correctly named as *Tuckermannopsis subalpina*, richly fertile and growing abundantly on the ground beneath the spruce trees or on huckleberry twigs. I also found "*Cetraria*" *merrillii* of course which is still one of my "problems" with no clear generic affinity so far, and at Port Orford the still more problematic "*Cetraria*" *californica*. In a way this remarkable species has about the same narrow range as the endemic Port-Orford Cedar or Lawson Cypress, *Chamaecyparis lawsoniana*.

We arrived in Vancouver and IMC5 on Saturday August 13 after almost two weeks and a healthy outdoor life on camp grounds, Tom Nash's family recipes, lichen collecting and lots of big trees in the great North American West. The big trees remarkably continued to dominate the scene, but in a quite different way. It started slowly already in Regensburg at IMC4 but now the trees based upon molecular data had grown in all dimensions. The molecular data presented had become even difficult to interpret and evaluate. We have arrived at a stage in molecular work where we can see mainly large methodological difficulties and we must be extremely careful in interpreting the results. We have arrived to a stage where we often get a universe of equally parsimonious trees as Francois Lutzoni explained in his splendid talk. To Tom and the great ASU team, thanks for the early morning tea and the late night spades.

Ingvar Kärnefelt

Highlights from the Post-IMC5 British Columbia Field Trip

On August 22, 1994, 50+ lichenologists from around the world convened after the Mycological Congress for a week-long tour of southern British Columbia's rich lichen diversity. As our bus driver Frank attempted to fit the piles of luggage into the bus' small compartment, the concern on his face was apparent, but once behind the wheel with all luggage finally crammed inside, all cares slipped away as we hit the road. The large bus and two passenger vehicles left Vancouver literally brimming with luggage, collecting gear, food, and smiling scientists.

After collecting several interesting *Hypogymnia* (*H. apinnata*, *enteromorpha*, *inactiva*) and *Cladonia* (*C. bellidiflora*, *albonigra*, *ecmocyna* ssp. *occidentalis*) species, among others, in the coastal western hemlock zone and experiencing the only precipitation of the trip, we continued northward to the base of Whistler Mountain, a well known ski resort. Here we boarded a gondola up into the clouds and what appeared as though it would become a very wet experience. To our surprise and delight the weather cooperated and the alpine collecting was outstanding. *Tholurna dissimilis*, *Pseudephebe pubescens*, *Cornicularia normoerica*, *Thamnolia vermicularis*, and *Solorina crocea* were some of the macrolichens observed in this previously uncollected area. On the trip down the mountain several of us were lucky to see a black bear and cub. That night, our first, was spent in a nearby youth hostel, where the common quarters encouraged interesting group interactions that might not otherwise have occurred!

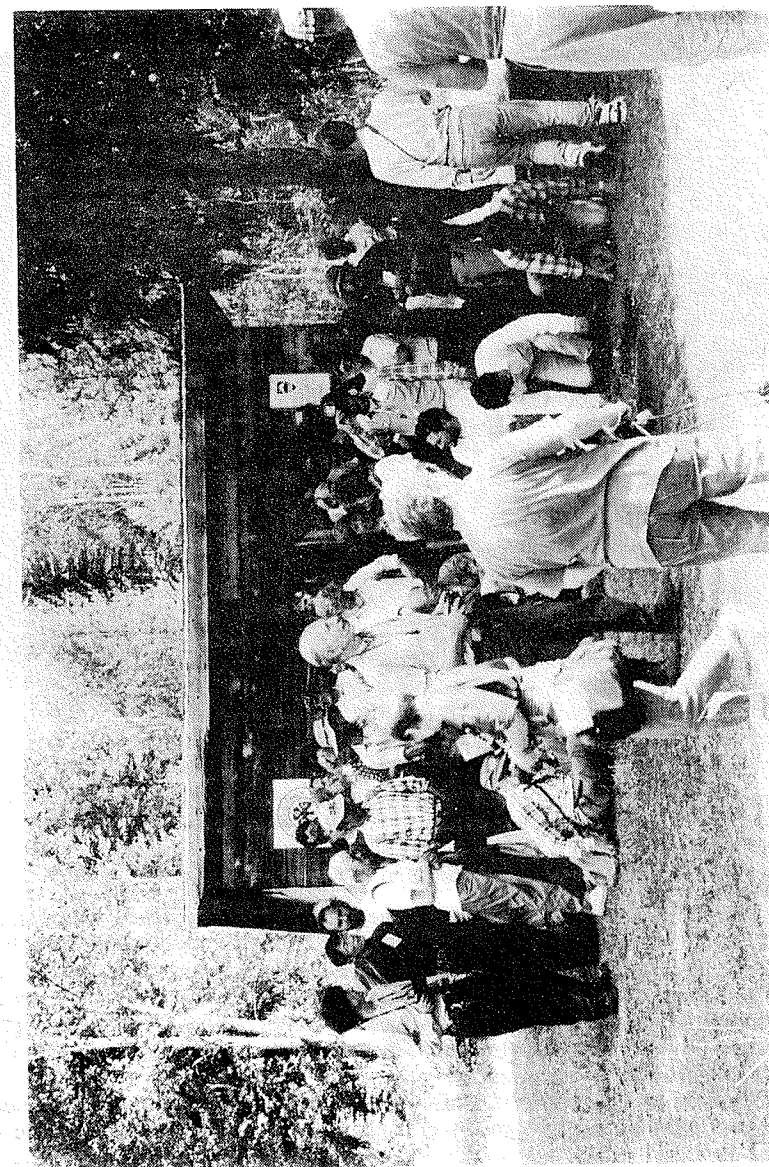
Our second day afforded some spectacular scenery as we made the long trip to Wells Gray Provincial Park, where the next three nights would be spent. We visited several small provincial parks en route, including Marble Canyon, known for its steep limestone cliffs. *Collema fuscovirens*, *C. subparvum*, and *Teloschistes contortuplicatus* were collected here. The forests become increasingly drier as one moves into interior British Columbia. Teuvo Ahti entertained is throughout the trip over the bus microphone with his valuable commentary and personal comments on the region's ecology as we travelled through the different vegetation zones.

By now, if not before, we were all becoming increasingly impressed with the amount of work and attention to detail required to organize a field excursion of this magnitude. Irwin Brodo and Trevor Goward are to be highly commended for their effort. I only hope that they were able to relax and enjoy it as much as the participants did.

We split into three groups the third day, depending on collecting interests. Along a forest-to-alpine transect (1800-2300 m) of Trophy Mountain, one group stayed in the forest, another hiked to the subalpine zone, while a third hit the alpine. The views were spectacular, particularly from the latter two points. Many interesting lichens were found, most notably for me in the alpine were the extensive colonies of *Alectoria ochroleuca*, *A. nigricans*, and *Dactylina ramulosa*. Other highlights included *Lecanora pringlei*, *Tremolecia atrata*, *Umbilicaria havaasii*, *U. cylindrica*, *Brodoa oroarctica*, and, in a small stream down slope, *Hydrothyrea venosa*.

We collected in various-aged forests of the interior cedar-hemlock zone during the next two days in Wells Gray. Dramatic waterfalls were also present at many of the stops in this rugged, wilderness park (although some lichenologists were too busy collecting to notice them!). At several locations, old fence posts from early homesteads provided interesting collecting, as well as photographic opportunities (i.e. how many lichenologists can you gather around an old fence post?). Notable lichens from these sites include *Evernia mesomorpha*, *Calicium* and *Chaenotheca* spp., *Thelomma ocellatum*, *Lobaria hallii*, *Ramalina thrausta*, *Pilophorus cereolus*, *Cladonia norvegica*, and *Esslingeria idahoensis*, and many, many others.

From Wells Gray we proceeded on to the *Artemisia*-grasslands and dry *Pinus ponderosa* forests of the Kamloops region for a day of collecting. Calcium rich silt slopes were the focus of one stop where we saw several species of *Psora* (*cerebri-*



Photograph: Participants of the field trip gathering for the official photograph.



Photograph: The participants of the Post-IMC5 British Columbia field trip

formis, *decipiens*, *tuckermannii*), *Buellia geophila*, *Cladonia firma*, *Caloplaca tominii*, and other soil-occurring lichens. Dry forests and rock outcrops were the focus of the afternoon, where *Cetraria merrillii*, *Bryoria abbreviata*, *Vulpicida canadensis*, and *Rhizoplaca melanophthalma* were observed. The day was topped off by a wonderful evening and dinner at Trevor's parents, who were extremely generous to invite the entire group to their Kamloops home. How they pulled off the event so smoothly is beyond me!

We returned to Vancouver in a rain storm late the next day. Some group members were continuing on to Vancouver Island for the second portion of the field trip. The rest of us said our goodbyes, and judging by their extent, many new friends were made during a very memorable week.

Ann DeBolt

European lichenologist: Would your research benefit from a visit to Helsinki?

The European Community (EC) and the Department of Botany, University of Helsinki, have undersigned a contract aiming at enhancing research and European cooperation within the following fields: 1. lichenology, 2. bryology, and 3. monitoring of atmospheric pollution and deposition using mosses and lichens as indicators. The contract recognizes the Department of Botany as a "Large Scale Facility", based mainly on the excellent lichen and moss herbaria, good libraries, and high standard of research. According to the contract, the Department of Botany offers a total of 60 man-months for post-doctoral visiting scientists during the period May 1994 - April 1998. All expenses concerning travel, subsistence (e.g., accommodation, food), and research are covered by the financial support (total ECU 100 000) from the EC. Standard research equipment, such as light microscopes and microcomputers, will be provided by the Department of Botany.

The contract presupposes that the visitors must be citizens of an EC member country, or of Sweden, Norway, Iceland, or Austria. Selection of visitors to Helsinki will be based on applications. These should include a concise research plan (subject, methods, aims), curriculum vitae, and the suggested duration and time of visit. The selection will be made by a "Selection Panel" set up for this special purpose and consisting of the following persons: Prof. Timo Koponen (project organizer, Univ. of Helsinki); Prof. Teuvo Ahti (Univ. of Helsinki); Dr. Ahti Mäkinen (Univ. of Helsinki); Prof. Dr. Jan-Peter Frahm (Univ. Duisburg); and Dr. Harrie J. M. Sipman (Bot. Museum Berlin-Dahlem). If considered necessary, visits can be arranged fairly rapidly after approval of application. The applicants will normally be informed of approval or rejection within one month from the date of receipt of application.

Applications should be sent to Prof. Timo Koponen, Department of Botany, P.O. Box 7, FIN-00014 University of Helsinki, Finland. In case of any queries, please contact Johannes Enroth (address as above, fax + 358 0 708 4830).

California Lichen Society founded

On January 29, 1994, the California Lichen Society was founded in Santa Cruz. The President is Janet Doell, and 21 members are listed at present. Focus of the society will be promotion of the appreciation, conservation and study of the California lichens, and it will conduct field trips and seminars. Vol. 1(1) of the Bulletin of the California Lichen Society has just appeared. Info: California Lichen Society, c/o 2337 Prince Street, Berkeley CA 94705, USA.

Lichens of California still available!

Mariette Cole informs that anyone wanting a copy of the Lichens of California by Hale and Cole should let her know. Address: Dr. Mariette S. COLE, Concordia College, 275 North Syndicate Str., St. Paul, MN 55104-5436, USA. Tel: (612) 641 8750. Fax: (621)659 0207. Email: <Cole@luther.csp.edu>. She can purchase the paperback version and send it for US\$10.

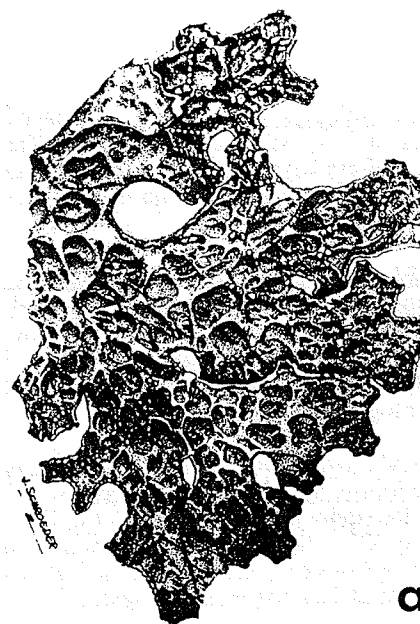
ABLS Lichen Exchange

The lichen exchange organized as part of the activities of the American Bryological and Lichenological Society is being moved to Arizona State University under the direction of Thomas H. Nash III. He proposes to increase the frequency of exchanges to twice a year and invites any member of the International Association for Lichenology to participate. Exchange collections consisting of 10 to 15 duplicates are requested at your earliest convenience and by no later than 31 Oct., 1994. Lists of available material will be prepared in November and circulated to all people who have submitted exchange material. Collections from anywhere in the world are welcome. Please only send fully identified material with the appropriate number of labels. Address: Thomas H. Nash III, Department of Botany, Arizona State University, Box 871601, Tempe AZ 85287-1601, USA.

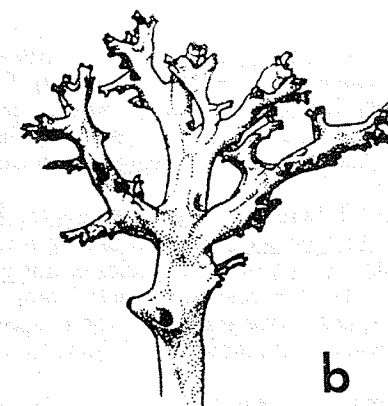
Mason Hale's printing plates to the Farlow

Long-time members of IAL will probably remember with pleasure the days when the Newsletter was printed on glossy paper with high-quality type. This was made possible through our former president Mason Hale, who as a hobby collected printing machines in his basement and kept them working. From 1968 to 1974 he printed 12 issues on his machines, with hand-set type. The issues bear the notice "Hale & Son, Printers, Arlington, Virginia". The job was very time-consuming, so that Mason had to give up (see editor's comment by Irwin Brodo in ILN 9(1): 19). The printing technique used required that illustrations were to be engraved on metal plates, a complicated and costly procedure. These plates were not discarded after the printing, but kept in Mason's basement. His wife, Beatrice, is taking care that these plates do not get lost and has made a preliminary arrangement with the Farlow Herbarium that they be conserved there.

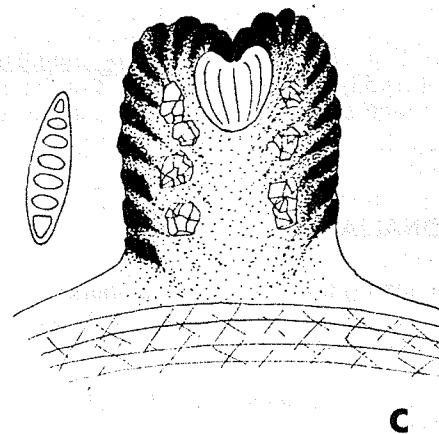
A selection of those plates which appeared on the front covers is shown on the opposite page: A. *Lobaria pulmonaria*; B. *Cladonia perforata* Evans, drawn by N. Halliday; C. section of ascocarp of *Graphis subelegans* Nylander, drawn by M. Wirth; D. *Cladonia balfourii* (= *C. subradiata* (Vain.) Sandst.), drawn by N. Sammy.



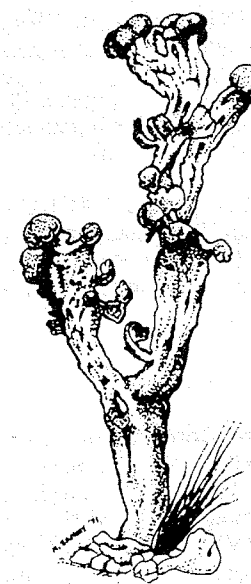
a



b



c



d

New Literature

André APTRoot & Kok van HERK. 1994. Veldgids korstmossen. 144 pages. Available from: KNNV-Uitgeverij, Oudegracht 237, NL-3511 NK Utrecht, The Netherlands. Price Dfl. 34,50 excl. postage. (offers keys, descriptions and colour pictures of c. 120 of the commonest lichens in The Netherlands; with introductory chapters; intended for beginners; in Dutch).

José M. EGEA & Pilar TORRENTE. 1994. El género de hongos liquenizados Lecanactis (Ascomycotina). Bibliotheca Lichenologica Band 54. 205 pages. (a world-wide revision of most species of this genus; three genera are recognized: *Lecanactis* with 24 species, of which 6 new, *Lecanographa* with 27 species of which 3 new, and *Sipmania* with 1 (new) species; keys, descriptions and illustrations are provided, with indications of distribution, ecology, chemistry; in Spanish).

Trevor GOWARD, Bruce McCUNE & Del MEIDINGER. 1994. The Lichens of British Columbia. Illustrated Keys. Part 1 - Foliose and Squamulose Species. 181 pages. Available from: Crown Publications Inc., 546 Yates Street, Victoria, B.C., V8W 1K8, Canada. Price Can\$ 32. (keys to 327 foliose and squamulose lichen species in British Columbia, with many drawings of key characters and indications of habitat, range and chemistry; with a selection of 124 distribution maps).

Erika HINTEREGGER. 1994. Krustenflechten auf den Rhododendron-Arten (*Rh. ferrugineum* und *Rh. hirsutum*) der Ostalpen unter besonderer Berücksichtigung einiger Arten der Gattung *Biatra*. Bibliotheca Lichenologica 55. 346 pages, 8 plates. (keys, descriptions, illustrations, distributional and ecological data for 118 species found on the branchlets of *Rhododendron* in subalpine dwarf scrub mainly in Austria; in German).

Ivan PISUT, Anna LACKOVICOVA & Eva LISICKA. 1993. Šúpis lisajnikov Slovenska. Biológia, Bratislava 48, Suppl. 1: 53-98. (The first checklist of Slovak lichens, based on literature records; lists 1466 taxa, with indication of degree of threat, and 681 references; in Slovak).

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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). Photocopies are available of: 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.

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