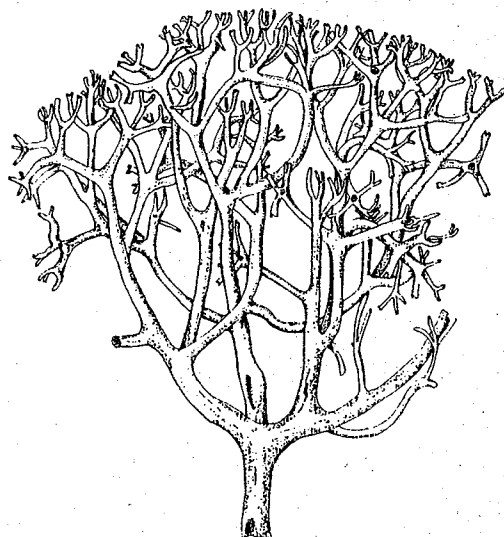


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IAL membership is open to anyone who has an active interest in the study and use of lichens. The subscription is US \$ 20.00 or DM. 30.00 for a four-year period. Subscriptions should be sent to the Treasurer or Deputy Treasurer:

H. Thorsten Lumbsch, Universität Essen, Fachbereich 9/Botanik, Postfach 103 764, D-4300 Essen 1, 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, Dept. of Plant Sciences, University of Bath, Claverton Down, Bath, Avon, BA2 7AY, 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 A. 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

Treasurer: H. Thorsten Lumbsch, Universität Essen, Fachbereich 9/Botanik, Postfach 103 764, D-4300 Essen 1, Germany.

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Members-at-Large: Gintaras Kantvilas (Hobart, Australia), Bruce McCune (Corvallis, USA), Wendy Nelson (Wellington, New Zealand), Pier-Luigi Nimis (Trieste, Italy), Tiina Randlane (Tartu, Estonia), Leopoldo Sancho (Madrid, Spain), Gernot Vobis (Bari-loche, Argentina), Dirk Wessels (Pietersburg, South Africa), Isao Yoshimura (Kochi, Japan).

## RESEARCH NEWS & NOTES

**Aptroot, André** (Baarn, Netherlands) successfully defended his PhD thesis on pyrenocarpous lichens on 15 February. His results are published in two volumes, one entitled "A Monograph of the Pyrenulaceae.." (see ILN 25(2), p. 31), and the second "Systematic studies on pyrenocarpous lichens and related fungi", see below under New Literature. See also contribution on p. 9.

**Bartok, Katalin** (Cluj, Romania) spent ten days at the Botanical Institute in Graz at the invitation of Josef Poelt, who made her stay both profitable and enjoyable. Here she had the opportunity to study a vast amount of lichenological literature, to discuss and complete two papers on the Stictaceae and Pannariaceae of Romania, and to identify species from the Danube Delta collected in May 1992 as part of a detailed 5-year study of the flora and fauna of this biosphere reserve.

**Galun, Margalith** (Tel-Aviv, Israel) informs us that selected papers of the First International Symbiosis Congress, held in Jerusalem November 1991, appeared in Symbiosis, vol. 14 (1-3), 1993. Included are several articles on lichens, such as: The coordination of development of symbionts in mutualistic symbiosis with reference to the cell cycle of the photobiont in lichens (by D. J. Hill, Bristol); The ef-

fects of wetting and drying on symbiont interaction in lichens (by D. H. S. Richardson, Dublin). The Second International Symbiosis Congress is planned for 29 July - 5 August 1995 in Dundee, organized by Dr. N. W. Kerby, Biological Sciences, University of Dundee, Dundee DD1 4HN, UK.

**Hafellner, Josef** (Graz, Austria) is continuing work on several lichen genera. *Pyrrhospora* in Australia will be studied together with J. Elix. *Pleopsidium* in North America is planned to be revised in cooperation with T. Nash III. Part of the time will also be spent on further studies in polyspored Lecanorales as well as in lichenicolous fungi.

**Hoffmann, Nikolaus** (Graz, Austria) has started a revision of hyaloame-rosporous lichenicolous pyrenomycetes (*Guignardia* coll., *Physalospora* coll.) for a master thesis guided by Josef Hafellner. Sending relevant specimens both determined and undetermined will be greatly appreciated.

**Möslinger, Markus** (Graz, Austria) has started floristic and phytosociological work on lichens growing on metal-rich rocks in Styria (Austria) under the guidance of Josef Hafellner.

**Muhtar, Avihay** (Tel-Aviv, Israel) is

continuing his Ph.D. thesis on comparison of free-living and symbiotic photobionts, using DNA-fingerprinting and immunological techniques, under the guidance of Margalith Galun and Jacob Garty.

**Sipman, Harrie** (Berlin, Germany) returned recently from fieldwork in Papua New Guinea and in Guyana. The first trip was in cooperation with André Aptroot, Paul Diederich and Emmanuel Sérusiaux. The material collected will be studied during the next few years in cooperation with the other participants. The second trip was as a member of an expedition organized by the University of Utrecht for the Flora of the Guianas project. Most of the time was spent in a sa-

vanna area and adjacent high forest in the southernmost part of the country, from where valuable additions to the lichen flora of the Guianas are expected, particularly in the families Thelotremaaceae and Trypetheliaceae. He has also accepted the job of preparing biannual lichen systematics treatments for *Progress in Botany*, and would appreciate to be informed of important new literature which should be referred to in this series.

**Wilfling, Alois** (Graz, Austria) has begun floristic and phytosociological studies on lichens growing on high altitude marble outcrops in Styria (Austria) under the supervision of Josef Hafellner.

### Requests

**Pat McCarthy** (National Herbarium of Victoria, South Yarra, Victoria 3141, Australia) has begun a revision of *Clathroporina* s. str. (excluding *Topelia* and *Belonia*). He would welcome named and unnamed specimens on loan.

### The General Meeting of IAL, 3 September 1992 in Båstad, Sweden

Present: David Galloway (President), Lars Arvidsson (Secretary) and about 230 members.

1. The minutes of the general meeting in Regensburg, 31 August 1990 (see ILN 24 (1), 1991), were accepted.
2. The Secretary announced that the IAL is now formally affiliated with the IMA and the IUBS as decided in Regensburg.
3. Council reports for the period 1987-1992 were read by the President, the Secretary and the Editors. Reports from the Treasurer and Deputy Treasurer were read by the Secretary. Texts see ILN 25(3), 1992.
4. The IAL dues was discussed. The subscription is US \$ 20 or DM 30, due after each Council change. Cheques will not be accepted, unless they are made out for DM 36 since otherwise the bank fees will overstretch the IAL budget.
5. Changes in IAL Constitutional Rules. Following discussions in Regensburg, IAL Rules 6, 7 and 9 were considered to be due for amendment. After some ventilation the changes were voted upon. The emended rules now read as follows:
 

**Rule 6:** "The elected officers of the Association (IAL) shall be a President, Vice-President, Secretary, Treasurer, Editor and two Council Members-at-Large. These seven officers will form the Council. Additional officers may be appointed at the discretion of the Council".

**Rule 7:** "Election of officers shall take place at meetings of the Association (IAL) convened for the purpose, normally every 4 years, or held at regular IAL Symposia, or at a regular International Mycological Congress, or at a regular International Botanical Congress, unless circumstances require a special meeting. Nominations for..... etc.".

**Rule 9:** "The Association (IAL) shall normally hold General Meetings at Symposium meetings of the IAL, at International Botanical Congresses and at International Mycological Congresses. Additional meetings ..... etc.".

6. The President announced the following future meetings and Congresses:

\* Post-symposium excursion to Vadstena to consecrate a plaque in memory of Erik

Acharius. David Galloway and Roland Moberg will lead this excursion.

- \* 1993, May: International Workshop Meeting "First International Workshop on Ascomycete Systematics, Problems and Perspectives in the Nineties". A NATO Advanced Research Workshop in Paris. Cosponsored by: IMA, IAL, ICTF, Association Française de Lichénologie etc.
- \* 1993, September: International Botanical Congress in Tokyo.
- \* 1994, August: Fifth Mycological Congress in Vancouver, Canada.
- \* 1995: Symposium on foliicolous lichens in Hungary.
- \* 1995: Field Meeting in New Zealand.
- \* 1996: IAL 3 in Salzburg.

7. Election of Officers and Council Members. The IAL executive Council 1992-1996 is as follows:

President: Ingvar Kärnefelt, Lund, Sweden  
 Vice-President: Jack Elix, Canberra, Australia  
 Secretary: André Aptroot, Baarn, The Netherlands  
 Treasurer: Thorsten Lumbsch, Essen, Germany  
 Deputy Treasurer: Clifford Smith, Honolulu, USA  
 Editors: H. Sipman, Berlin, Germany and M. Seaward, Bradford, UK  
 Members-at-Large: G. Kantvilas, Hobart, Australia; B. McCune, Corvallis, USA; W. Nelson, Wellington, New Zealand; P.-L. Nimis, Trieste, Italy; T. Randle, Tartu, Estonia; L. Sancho, Madrid, Spain; G. Vobis, Bariloche, Argentina; D. Wessels, Pietersburg, South Africa; I. Yoshimura, Kochi, Japan.

8. IAL Awards.

**Mason Hale Award:** Dagmar Triebel, München, Germany was the first winner of the Mason Hale Award which was presented by the Vice-President.

**Acharius Medal:** Thirteen medals were distributed to the following lichenologists:

Gunnar Degelius (presented by the Secretary)  
 Rolf Santesson (presented by Roland Moberg)  
 John Thomson (presented by Irwin Brodo)  
 Otto Lange (presented by Ludger Kappen)  
 Josef Poelt (presented by Hannes Hertel)  
 Aino Henssen (presented by Martin Jahns)  
 Hildur Krog (presented by Peter James)  
 Peter James (presented by Brian Coppins)  
 William Culberson (presented by Tom Nash)  
 Chicita Culberson (presented by Clifford Smith)

Antonin Vezda (presented by Josef Poelt)  
 Dharani Awasthi (presented by Isao Yoshimura)  
 Hans Trass (presented by Teuvo Ahti)

9. The President closed the meeting by expressing his thanks to all participants, conveners, chairmen and speakers for their contribution, and particularly to Ingvar Kärnefelt and his staff for making this symposium such a success.

--- Lars Arvidsson

## The lichens in the Ukrainian National Herbarium in Kiev (K W)

The National Ukrainian Herbarium is included in the N. G. Kholodny Institute of Botany of the Academy of Sciences of the Ukraine. It consists of five sections: vascular plants, mycology, bryology, lichenology and algology. The lichen herbarium has been revised by Sergey Kondratyuk together with Mrs. Natalya Beznis. This work was finished in December 1992, and the main results are presented here.

The present Ukrainian National Herbarium was created in 1921 as the herbarium of the Academy of Sciences of the Ukraine. The first collector and curator of lichens was A. Archimovich. Since 1925 the lichenological collections increased quickly due to A. Oxner, who was the main founder of lichen herbarium.

The lichen herbarium comprises about 46,000 specimens. They originate mainly from the Ukraine (Carpathian mountains, plains and Crimea) and various parts of the former Soviet Union. The material was at first arranged according to the system of Zahlbruckner, later to that of Poelt (1973). Within the families, the genera and species are ordered alphabetically, and within each taxon there is a geographical arrangement in three main groups: the Ukraine, the countries of the former Soviet Union, and the other countries. Material from the Ukraine is organized according to 25 administrative regions.

The lichens of the Ukraine have been mainly collected by A. N. Oxner and M. F. Makarevich, further by A. S. Lazarenko, E. M. Bradis, N. V. Kondrat'yeva, D. K. Zerov, E. Elin, F. Gryn', M. I. Kotov, E. M. Lavrenko, Y. D. Kleopov, I. Zoz.

Large collections (comprising more than 300 specimens) are also present from Byclarus', Azerbajdzan, Ural mountains, Altai, Baikal Chita and Far East made by A. N. Oxner, from Azerbajdzan by S. Barkhalov, from Arctica by F. Gryn', B. N. Gorodkov and B. A. Tikhomirov, from the Ural by V. Govorukhin, from Middle Asia by A. S. Lazarenko, and from Yakutiya by M. Karavayav, T. Rabotnov, N.

Savich and V. Sheludyakova.

Selected type specimens, a small collection of historically interesting lichens and some exsiccates (Vezda, Mereschowsky, Rabenhorst, etc.) are kept separately. The collection of selected type specimens is comparatively small. It includes type specimens of *Bacidia pulchra* Oxner, *Endocarpon inconspicuum* Oxner, *E. obscuratum* Oxner, *Lecania zinaidae* Oxner, *Lecanora multispora* Makarevicz, *L. nemoralis* Makarevicz, *Melaspilea oxneri* Makarevicz, *Staurothele columellaris* Oxner, *Thrombium cretaceum* Oxner, *Verrucaria cretophila* Oxner, and *V. pontica* Oxner from Ukraine. Further type specimens of *Bacidia zerowii* Oxner, *Parmelia altaica* Oxner and *P. submundata* Oxner from the Altai; *Leptotrema lithophila* Oxner and *Parmelia duplicatoides* Oxner from the Far East; *Aspicilia transbaicalica* Oxner from the Ural; *Cetraria annae* Oxner, *Cladonia kanewskii* Oxner, *Lecidea gorodkovii* Oxner, *Lecidea karavajevii* Oxner, *L. lenensis* Oxner, *Parmelia borysororum* Oxner, *P. teretiuscula* Oxner and *P. tominii* from Siberia; *Acarospora zeravshanica* Kudratov, *Aspicilia lazarenkoi* Oxner, *A. oxneriana* Blum, *A. thjyanchanica* Oxner, *Buellia gordiaginii* Oxner, *Buellia kirgisorum* Oxner, *Caloplaca ferganensis* Tomin, *Cetraria potaninii* Oxner, *Lecania bullata* Oxner, *L. ferganae* Oxner, *Placodium kotowii* Oxner, *P. sphaeroideum* Oxner, *P. verruculiferum* Oxner, *Ramalina kazakhorum* Oxner, *Staurothele lazarenkoi* Oxner and *S. laevinae* Oxner from Middle Asia; *Aspicilia grossheimii* Oxner, *Phylloporina obsoleta* Oxner and *Ramalina kardakovae* Oxner from the Caucasus.

Undetermined specimens are available from Belarus' (collector M. F. Makarevich), the Crimea (O. G. Kopachevs'ka), the islands of Oceania and Africa (O. B. Blyum), Mongolia and the Kuril Islands (als O. B. Blyum), the Novosibirsky islands (N. D. Alexandrova) etc.

A detailed description of the material (collectors, localities, etc.) will be published in the Ukrainian Botanical Journal. Loan requests, appointments to do research in the herbarium and requests for more information regarding the contents and collectors should be addressed to: Dr. S. Kondratyuk, Lichen Herbarium, N. G. Kholodny Institute of Botany of Academy of Science of Ukraine, Tereshchenkivs'ka Street 2, 252601 Kiev-DSP-1, Ukraine.

--- S. Kondratyuk

### Reorganization of botany in Copenhagen

From January 1st, 1993 the three Botanical Institutes of the University of Copenhagen have fused to form a single Botanical Institute. The correct work addresses of U. Søchting and V. Alstrup are now:

Ulrik Søchting, Botanical Institute, Dept. of Mycology and Phycology, Ø. Farimagsgade 2 D, DK-1353 Copenhagen K, Denmark.

Vagn Alstrup, Botanical Institute, Dept. of Plant Ecology, Ø. Farimagsgade 2 D, DK-1353 Copenhagen K, Denmark.

Other addresses remain the same.

From February 15th a new telephone system will also be operative and all telephone and fax numbers will change. The new numbers are:

Vagn Alstrup, phone (45) 3532 2363, fax (45) 3532 2321.

Michael Andersen, phone (45) 3532 2188, fax (45) 3532 2210.

Steen N. Christensen, phone (45) 3532 2189, fax (45) 3532 2210.

M. Skytte Christiansen, phone (45) 3532 2247, fax (45) 3532 2210.

Eric S. Hansen, phone (45) 3532 2189, fax (45) 3532 2210.

Lichen Herbarium, phone (45) 3532 2188, fax (45) 3532 2210.

Mona Nissen (assistant), see lichen herbarium.

Ulrik Søchting, phone (45) 3532 2313, fax (45) 3532 2321.

--- Vagn Alstrup

### A letter from the President: The state of Dutch lichenology

Mark Seaward and myself were fortunate to have been invited to attend the defense of André Aptroot's thesis "Systematic studies on Pyrenocarpous lichens and related fungi" which took place in Utrecht in the historic Academiegebouw on 15 February 1993. It was a very traditional ceremony with a large number of professors wearing cap and gown, some of them only listening and a few others acting as opponents. David Hawksworth was one of the invited opponents who was allowed to ask a few questions in the exactly 45 minutes long ceremony. André did rather well in spite of the tradition of wearing tails and standing in front of a desk. After the defence he was promoted by Professor Hennipman.

The future seems rather good for him now being appointed to a post doc opportunity at the Centraalbureau voor Schimmelcultures in Baarn. However, he is supposed to work mainly on various groups of fungi and not on tropical lichens, his own specialism. It is remarkable that a rich country like The Netherlands with a population of 15 million people, with high social standards and an excellent system of education, does not seem to be able to maintain one single position for lichenology. Harrie Sipman, who defended his thesis on the lichen family Megalosporaceae in 1983, had to go to Berlin to continue his work as a lichenologist and Hans Martin Jahns and Fred Daniëls also left to Germany. In the same time where re-

search on biodiversity of the world's biota and especially in tropical regions is being encouraged in most western countries, a country like The Netherlands does not seem to have the slightest interest in supporting students highly qualified for research on tropical lichens. André Aptroot and Harrie Sipman in fact belong to the very few specialists we have covering all groups of tropical lichens, together with Klaus Kalb and Dick Harris.

There is an obvious lack of interest in The Netherlands to support highly qualified research on cryptogamic groups in general. André and Harrie were both educated in the well-known Institute of Systematic Botany at the University of Utrecht under the supervision of Rob Gradstein, one of the world's leading bryologists. Today the bryological and lichenological branch of this famous institute is almost demolished due to lack of interest of the University and Gradstein's "guaranteed" position has been changed in a temporary one with reduced financial support. The whole situation is remarkable, and I suddenly realize that in the small country where I was fortunate to be born and to get my education, the future for systematic botany and research on tropical groups including lichens is not bad at all compared to the situation in e.g. France, Germany, The Netherlands, the United Kingdom or the United States of America. We still have very active young professors as leaders of the Departments of Systematic Botany in Göteborg, Lund and Uppsala, where many students specialize in research on tropical groups. There is also an active group at the Department of Botany of the University of Stockholm, associated to staff members of the Natural History Museum.

We must continue to shape opinion and stimulate awareness for the need of systematics in all plant groups including the lichens, especially during days when we have all become so concerned with biological diversity and conservation. I will try hard to devote some of my time as President of the IAL for this important task.

--- E.I. Kärnefelt

### Biodeterioration of Chinese Monuments

Since 1985 we are studying biomicrokarsts. In order to observe micromorphological biokarst development, field work was carried out on limestone bedrocks and limestone sculptures, relics and monuments, and many samples from various environments all over China were collected. Four basic biokarst erosion forms have been found: pin-prick, microgroove, ultra borehole and patched erosional pit and related micro-terrace. We have also found that cyanobacteria and lichens are the major biodeteriorators of antiquities in Nanjing city (Jiangsu province, China).

On Gang Jia Xian, about 10 km east of Nanjing city centre, there is a tomb of



"Young doctor" André Aptroot with "Doktor-Hut", sitting informally between David Hawksworth (right) and Harrie Sipman (left).

the Liang Dynasty of the 5th century. A limestone sculpture of a mythological supernatural being called Bi Xie stands there, surrounded by cultivated fields. The ancient Chinese thought it was a powerful animal, able to keep away evil. Now it features on the Nanjing city emblem. Between 2 and 5 km from the tombs there are petrol, porcelain, detergent and chemical fertilizer factories. Bi Xie's body is severely weathered. We are not permitted to take samples, but lens observation shows an endolithic *Verrucaria* sp. growing on it. The mycobiont hyphae penetrate into calcite crystals and the perithecia are immersed in a weathered pin-prick (diameter 0.1-1 mm).

The Palace of Ming Park (15th century) is located within Nanjing City. It is a ruined Ming palace which was completely destroyed during warfare in the 1930s, and no ancient buildings remain. However, some limestone work such as pillar bases, large square pots and sculptured walls can still be seen today. The lichen flora on this stone work is different from that on Bi Xie; for example, the pots are



colonized by a *Caloplaca* sp. which grows in many polluted environments in this city. Cyanobacteria occupy most of the grooves of the stonework. The city's main road passes through the park, carrying more than 10,000 cars each day, with the result that the park suffers from pollution by car fumes.

China is a large country with one of the oldest cultures in the world. Different environments exist in the south and north, and the most important stone monuments are in the centre or north of the country. What lichen flora there is on these we do not know. We wish to visit and investigate them, list their floras, and find a way of measuring the rate of erosion by lichens and a method to control their growth.

The chemical process of erosion is complex, and in order to understand it in the situations outlined above, we need to do detailed field and laboratory work. Regrettably, however, funds are tight in China. There is no research money in our institutions and our own salaries leave nothing spare to pursue laboratory work or to find train fares for distant field work. We are appealing to IAL Newsletter readers with an interest in the work we are doing to collaborate with us, and thus hope to attract funding. We would be very glad to work in China with a lichenologist from another country, and continue the work ourselves in his/her absence. We would also be very happy to correspond with people with similar interests, to receive copies of related papers, or any other material which a reader of this article thinks would be of interest.

Address of the authors: Dr. Chen Shufan and Dr. Zhang Jie, Department of Biology, Nanjing Institute of Education, Bei Wei Road 41, Nanjing 210017, Peoples Republic of China.

--- Chen Shufan and Zhang Jie

### The Acharius Memorial at Vadstena

At a meeting of the IAL in London (7 September 1989) during the Conference on Tropical Lichens, a suggestion was made by a number of Swedish lichenologists (and endorsed by all other IAL members present) that a plaque, commemorating the distinguished Swedish lichenologist Erik Acharius (1757-1819), be prepared and placed in the churchyard at Vadstena, the town where Acharius spent the last ten years of his life and where he wrote his major lichenological works. A subcommittee consisting of Lars Arvidsson, Per Magnus Jørgensen and Roland Moberg was formed and asked to bring forward plans for such an Acharius Memorial, with the Lund Meeting (IAL 2) offering a suitable time and opportunity for unveiling the memorial. Since there is no memorial to Acharius in the fine churchyard in



The Acharius Memorial in Vadstena, Sweden.

Vadstena it was thought at first that a stone memorial in the churchyard would be most suitable. However, when Lars Arvidsson and Roland Moberg visited Vadstena they found to their surprise and delight that the house where Acharius lived, Bergenstråhlska Huset, Stortgatan 32, was still in existence, being owned by Prof. Göran Söderström of Stockholm who is restoring it to its former, early 19th century glory. They were shown over the house and garden and decided that a memorial on the end wall of the house would be much more appropriate than a tombstone in the Abbey Churchyard.

Meanwhile, fund-raising for the Acharius Memorial was underway with the Swedish Linnean Society, and the Linnean Society of London being early and major contributors to the memorial fund. Between them they contributed 45 000 kronor of the necessary 60 000 kronor which is the final cost of the memorial. The British Lichen Society and the IAL also made important contributions and the final sum will be made up by individual donations from IAL members. By November 1991, the subcommittee accepted Roland Moberg's recommendation of commissioning the sculptor Liss Eriksson to design and cast a bronze name-plate for the Acharius house in Vadstena.

The bronze memorial plaque is in two parts, comprising a profile portrait taken from the J. G. Ruckman engraving of Acharius which was used as the title page embellishment of *Synopsis methodica lichenum* (1814), and a roundel bearing Acharius's name and birth and death dates and the inscription "Pater Lichenologiae, Professor Honoris Causa, Medicus Provincialis Vadstenensis". Saturday 5 September 1992 was set for the unveiling, and Roland Moberg sent out invitations to important dignitaries in Vadstena, and to the Rectors, and Professors of Botany at the Universities of Lund and of Uppsala where Acharius had studied. A reply from Prof. Stig Strömholm, Vice-Chancellor of Uppsala University and President of the Royal Swedish Academy of Letters, History and Antiquities, is worth reporting here: "....I am afraid I cannot be with you, but I wish you the best of luck (including nice and clement summer weather) with what seems to me an eminently justified and nice initiative. There are too few *Plaques de marbre* in this austere country, and there should be more of them, in particular to honour those who made our poverty honoured in the world..."

On Saturday, 5 September 1992 a group of 25 lichenologists joined with the Mayor and Councillors of Vadstena in a short but dignified ceremony of dedication. Roland Moberg gave a short introductory address; David Galloway gave an account of the development of the Acharius Memorial project; Rolf Santesson spoke on Acharius as a lichenologist; and the memorial was unveiled by Prof. Bengt Jonsell, President of the Swedish Linnean Society. A speech of thanks was made to the IAL and the visiting lichenologists by the Mayor of Vadstena and then we were invited

to take wine and snacks which had been laid out on tables in the garden of Acharius's house. With light rain starting to fall, Prof. Söderström invited us to view the beautifully restored principal rooms of the house on the first floor which are furnished in early 19th century style and which contain fine restored examples of Swedish 18th century keyboard instruments: clavichord, fortepiano and transverse piano.

Vadstena is a most attractive small town delightfully situated on the shores of lake Vättern. It has an important Abbey Church, consecrated in 1430 and today the Church, with its associated monastery and convent buildings are among the notable features of the town which is dominated by an impressive almost fairytale moated Castle built between 1545 and 1620. The mediaeval town plan with its narrow, twisting streets has been preserved, together with many houses from the 18th and 19th centuries which gives the town its special charm. Lichenologists now have a very worthy place of pilgrimage, and I would strongly urge anyone who is planning a visit to Sweden to make sure that Vadstena and Acharius's house with its fine new memorial is on their itinerary. You will not be disappointed.

--- David Galloway



### Presentation of the Acharius medals on 3 September 1992 in Båstad, Sweden: speeches

#### Gunnar Degelius

Gunnar Degelius, born in Uppsala in 1903, is the Grand Old Man of Swedish, and indeed of World Lichenology. I presume that many of you are familiar with his work.

Degelius' thesis on oceanic lichens, defended in 1935, is a classic and typical of his approach to lichenology, with meticulous treatments of taxonomy, nomenclature and ecology. In 1936 Degelius' first paper on *Collema* appeared. It was a prelude to what became a life-long interest in the group. His outstanding monograph on this notoriously difficult genus in Europe appeared in 1954, and was followed by a revision of extra-European taxa twenty years later.

Floristic studies are another interest of Degelius. An early example is the flora of Ångermanland from 1931, which was followed by similar surveys of Norra Skåfön, Ornö and other parts of Sweden as well as North America, Iceland, The Azores and more recently the islands of Vega and Anholt. Although Degelius is best known for his taxonomic and floristic studies, it should not be forgotten that he has also made important contributions to the ecology and biology of lichens. A peculiar type of diaspores, "lichenized hormocysts", is one of his discoveries. Most valuable are perhaps Degelius' two papers on the succession of lichens on twigs, using the yearly growth of the branches to date the settlement of lichens.

Generosity and encouragement, particularly to young lichenologists, is one of his characteristic features. His wide knowledge has inspired and assisted scientists in many countries. He has travelled widely and built up a large herbarium. His marvellous library is scarcely surpassed anywhere.

Over the years, Degelius has published about 120 papers, mostly on lichens. His first scientific study, on *Arthonia spadicea*, appeared in 1923. I know that he now has a manuscript on new *Collema* species in preparation, and that he plans to take up SEM-studies of *Collema* spores. The Acharius Medal is an adequate homage to an outstanding contribution to lichenology spanning seventy years. We wish him all the very best in his present and future endeavours.

--- Lars Arvidsson

#### Prof. Dharani Awasthi

Prof. Dharani Awasthi was educated at the University of Lucknow where he obtained his Ph. D. in 1947. From 1952 he lectured in Botany at Lucknow University. He also studied at the University of Colorado at Boulder and obtained a Ph. D.

there in 1963.

Awasthi has long been interested in the lichens of his home country India and over the past 40 years has published many papers and monographs. His work on *Dirinaria* was a landmark. He has published a catalogue of Indian lichens and recently, comprehensive keys to Indian macrolichens and microlichens.

He has built up a comprehensive herbarium and encouraged many students in Indian lichens.

For his long and devoted service to the study of lichenology in India, I am very pleased to propose Dharani Awasthi as an Acharius medalist.

--- Isao Yoshimura

#### Chicita F. Culberson

Over the last three or four decades, the science of lichenology, or more specifically, the discipline of lichen systematics, has become increasingly identified with the use of secondary chemistry. For much of the same time period, the subject of this biographical sketch, Dr. Chicita F. Culberson, has been the leading lichen chemist, and much of our present knowledge base is a result of her work, or has been made accessible by her work.

Chicita Culberson (née Forman) was born on November 1, 1931 in Philadelphia, Pennsylvania. After high school, Chicita made the crucial decision to attend the University of Cincinnati, where she majored in chemistry. It was here that she eventually met her future husband and collaborator, Bill Culberson, certainly a fortuitous event for lichenology. Chicita graduated with high honors from the University in 1953. Another milestone occurring that summer was her marriage to Bill.

After completing her undergraduate degree, Chicita enrolled in the University of Wisconsin where, in 1954, she obtained a Master's Degree in chemistry. Her dissertation dealt with the very non-lichenological topic of using radioactive tracers to study the physical and chemical processes involved in electrodeposition. After Wisconsin, there was a one-year hiatus in Chicita's formal education while she accompanied Bill on his postdoctoral appointment at the Farlow Reference Library and Herbarium in Cambridge, Massachusetts. As a chemist, Chicita first became interested in lichens through her association with Bill. Her first real work with lichens occurred while they were at Harvard, where Asahina's microchemical techniques were applied to the "*Parmelia dubia*" group. Significantly, it was also during this time that Chicita began the extensive bibliographic indexing work that eventually led to her landmark book, "A Chemical and Botanical Guide to Lichen Products."

In 1955, Chicita moved to North Carolina with Bill who had accepted a position at Duke University. There, she embarked on a doctoral program in Organic Chemistry where she did research on the synthesis and mechanism of reactions in

terpenes related to camphor. Chicita received her Ph.D. degree in 1959, spent a couple of years as a Research Associate in the Chemistry Department, and since 1961 has been either a Senior Research Associate or an Adjunct Professor in the Department of Botany.

In a (still active) research career with so many highpoints and important publications, it is difficult to select out a few for special mention here in this brief synopsis. I believe that most lichenologists would agree, however, that two of Chicita's relatively early contributions have had a particularly outstanding impact on our own work and on the general advancement of knowledge in the areas of lichen chemistry and lichen chemosystematics. The first of these is her above-mentioned book, "A Chemical and Botanical Guide to Lichen Products" (and the supplements), a book which is packed with information on biosynthetic pathways, information about the different lichen substances, and listings of lichens from which they have been reported. Even though the most recent supplement came out some time ago now (a new supplement is in progress), these books represent an irreplaceable resource that is still used by many of us on an almost daily basis. The second very influential contribution is the series of papers begun in 1970 in which she explained her standardized techniques for the use of thin-layer chromatography in the identification of secondary lichen products. While the techniques first outlined by Chicita have been elaborated upon and computerized by other workers, the basic procedures used by most of us today remain those first described by her.

In addition to the above contributions, Chicita has published on a wide variety of topics relating to lichen chemistry and chemotaxonomy, and all of her nearly one hundred publications have been of consistently high quality. Special mention must be made of her work on cultured biont chemistry and resynthesis, chemosyn-dromic variation in lichens, chemical evolution, gene transfer and molecular biology. Chicita has done collaborative work with a large number of lichenologists and has given expert assistance to many more. Her number one collaborator of course is her husband Bill. Together, they have formed a partnership that has reaped great benefits for lichenology. At the risk of stretching a metaphor too far, it might be said that Chicita and Bill Culberson themselves provide an extraordinary example of a lichenological symbiosis. And, just as with lichens their symbiotic relationship provides a total that is more than sum of its parts.

--- T. L. Esslinger (read by Clifford Smith)

### William Louis Culberson

When one thinks of modern, innovative work being done on the systematics and evolutionary biology of lichens, it is Dr. William Louis Culberson's name that immediately comes to mind. For almost four decades now, he has been at the fore-

front of the use of lichen chemistry to study and identify not just the results but also the processes of evolution in lichens.

Bill was born April 5, 1929 in Indianapolis, Indiana, but his family moved when he was a young boy to Cincinnati, Ohio, where his father was a postal worker and his mother a school teacher. He attended school in Cincinnati, and when it came time for college he enrolled at the University of Cincinnati. Bill had been interested in plants from a young age, worked in a greenhouse as a youth, and when the time came he selected Botany as a college major. It was at the University of Cincinnati that he was introduced to cryptogams by the bryologist Margaret Fulford, and he wrote his first scientific paper, a floristic account of some lichens of eastern Kentucky, while still an undergraduate. It was also in Cincinnati that Bill met his future wife and collaborator, Chicita Forman.

By the time he graduated (with High Honors and as a Phi Beta Kappa) in 1951, Bill had become fluent enough in French that he decided to go to the Université de Paris to work on the equivalent of a Master's degree. Supported by a Fulbright Scholarship, he studied in the Laboratoire de Cryptogamie, where he wrote a dissertation on the systematics and phytogeography of *Enterographa crassa*. Returning to the States in 1952, Bill enrolled on a Ph.D. program in Botany at the University of Wisconsin, where he worked in a lichen ecology project under the direction of John Thomson. The research project, a study of the structure of corticolous lichen and bryophyte communities in the upland forests of northern Wisconsin, was a companion project to a similar one carried out in southern Wisconsin by Mason Hale, whose tenure as a graduate student, also with John Thomson, partially overlapped with that of Bill. It took Bill only two years to complete his doctoral program, and in 1954 he went as an NSF Postdoctoral Fellow to work with I. Mackenzie Lamb at the Farlow Reference Library and Herbarium of Harvard University. He and Chicita, having married the previous year, spent one year at the Farlow, working primarily on the *Parmelia dubia* group.

In 1955, Bill was hired as an Instructor by Duke University, primarily to organize and teach in their general botany classes. At the time, the lichen herbarium at Duke was almost nonexistent, and it has since been built into a major botanical resource through extensive travel and collecting by Bill and Chicita, by exchange with other herbaria, and by the purchase of several European collections (the Havaas herbarium from Norway and part of the Harmand herbarium from France). Among the highlights in his professional career during his tenure at Duke are the following. He has been a member of the editorial boards of the journals *Brittonia* (1972-74), *Madroño* (1972-76), *American Journal of Botany* (1977-79), *Cryptogamie*, *Bryologie et Lichénologie* (1972-present), and *Cryptogamic Botany* (1989-present). He served as Editor-in-Chief of *The Bryologist* (1962-1970), *Brittonia*

(1975), and *Systematic Botany* (1976-77), and in fact Bill was largely responsible for the founding and start-up of the latter highly respected journal. He has served as President of the American Bryological and Lichenological Society of America (1987-89), and has just completed a year as the President of the Botanical Society of America, a distinguished post rarely achieved by a cryptogamic botanist, especially a systematist. As one would expect of such an accomplished scientist, he has climbed steadily through the academic ranks, and today Bill occupies the prestigious Hugo L. Blomquist Professorship in Botany at Duke University.

Bill is an innovative and productive researcher with more than a hundred quality papers to his credit, and this does not count the Recent Literature on Lichens bibliographic lists from *The Bryologist*, which he originated and compiled for more than twenty-five years (to a total of 100 lists). As compilations, this latter series of publications might not be regarded with the same status as his many original research papers, but from the viewpoint of service to the lichenological community, they do deserve special mention here. As with Chicita, Bill's contributions have always been of such consistently high quality, often on the cutting edge of our science, that selecting out a few for special mention is difficult. If measured by their direct usefulness to and impact upon other lichenologists, the Recent Literature series mentioned above and the four checklists of North American lichens he wrote with Mason Hale would certainly merit special mention. Also among his most significant early works is the *Cetrelia* and *Platismatia* monograph, completed with Chicita, which was one of the first comprehensive revisions to make use of detailed chemical data to support both specific and generic level taxonomies. He has spent a significant part of his career working to clarify the biological and evolutionary significance of chemical variation in lichens, and his best known works are probably of this type. Among especially important papers in this vein are those dealing with the *Ramalina siliquosa* group, the *Parmelia perforata* group, the *Cladonia chlorophaea* group, and *Flavoparmelia caperata*-*F. baltimorensis*.

--- T. L. Esslinger, read by Tom Nash

### Prof. Dr. Aino Henssen

The Acharius Medal is an award to lichenologists who carry on the tradition of Acharius with excellent work on lichens. There are, of course, many prominent lichenologists who would be eligible for this honour and whoever is chosen will receive this medal as a representative of all the great scientists who would deserve it. I would like to propose Aino Henssen and as her first graduate student I have the pleasure of giving a brief synopsis of her life and work.

However, I feel that a mere account of her curriculum vitae with information on her date and place of birth, her academic career etc. is rather dull. You all know

Aino as one of our most prominent lichenologists, you know that she retired last year from her professorial appointment and this implies that you know her age, and you are quite familiar with the fact that she knows everything about fruit body development, about the little black lichens and about other things, such as Actinomycetes, as well.

Aino Henssen obtained her doctoral degree in Marburg in 1953 with a work on Lemnaceae, not on the taxonomy but on the physiology. I do not think that she liked this work that much. On our many field-trips I cannot remember that she ever so much as glanced at a single *Lemna*. In Marburg she had already become interested in cryptogams but she turned to her special field of interest during the following years when she worked in Finland, Sweden and Canada. She always told me that she became a lichenologist in Uppsala and it is perhaps fitting that she should receive this medal here in Sweden.

So this was the starting point of her many excellent publications but one has to do more to get a medal and to be honoured by this international family of lichenologists. This "more" is best explained by some reminiscences from the time when I was a student in her research group.

At that time it was the practice that students of biology attended half-day field-trips every Saturday - looking at higher plants in Summer and cryptogams in Winter, the latter meaning mosses. At the beginning of one winter term it was announced that the field-trips would be given by a new member of staff, called Aino Henssen. As we had never come across the first name "Aino", we did not know that she was a woman, a mistake not unusual - as Aino likes to explain. Perhaps, with her permission, I may borrow one of her favorite stories. At that time she received a letter from the prominent Dutch lichenologist Maas-Geesteranus addressed to Herr Dr. Aino Henssen. In her reply she explained that Aino is a female Finnish first name, with the result that Maas Geesteranus said to his wife: "How strange, this Herr Doctor Henssen has a female Finnish first name". Retrospectively, we students may be forgiven for not knowing this either. It also shows that very few women were to be found at universities at the time and how difficult it must have been for her to become accepted.

Anyway, before the first field-trip, Aino was presented to us by Professor von Stosch. He told us that she would introduce us to the lichens. Nobody had any idea what a lichen looked like as there are not too many lichens in Germany. Aino had with her a large basket from which she took all the tools necessary for hunting lichens - a hammer and chisel, a saw and two very large knives. From that we concluded that lichens could possibly be dangerous.

Let me be serious: it took only two or three excursions to get everyone more than interested. The enthusiasm shown by Aino infected all of us and we enjoyed

these field-trips more than any other we had followed; and perhaps not surprisingly, we did learn a great deal. At the end of the term I asked her about studying with her. I feel that it is this enthusiasm for lichenology and the ability to transmit it to others which is one of Aino's outstanding characteristics and it is precisely this enthusiasm which makes her a deserving recipient of the medal.

For all those who do not only want anecdotes - here are some facts: 1925 - born in Elberfeld, Germany; 1953 - Doctoral degree at Marburg University; 1953-54 - Institut für Obstbau, Universität Bonn; 1954-56 - Institut für Bakteriologie Berlin (first studies on Actinomycetes); 1956 - Botanical Institute, Helsinki; 1957-61 - Scholarship from the Deutsche Forschungsgemeinschaft and the Helene Lange Stiftung (work on lichens in Uppsala and Marburg); 1961-63 - Scholarship from the American Association of University Women and the Canadian Government (work in USA and Canada); 1963 - Curator (for cryptogams), Botanisches Institut Marburg; 1965 - Habilitation in Systematic Botany; 1970 - Professor in Marburg; 1990 - Retirement. Aino Henssen has published 100 scientific papers and books and collected about 60000 specimens of lichens for her herbarium.

--- H. M. Jahns

### Otto Ludwig Lange

Professor Otto Ludwig Lange is a lichenologist through and through - although most of his lichenological work is embedded in his general research interest: ecology and ecophysiology of plants.

Lange was born on the 21st of August 1927 in Dortmund. He studied Biology, Chemistry and Physics in Freiburg and Göttingen and was first qualified for a secondary school teachers' profession. In the same year (1952) he achieved the promotion as a Dr. rer. nat. at the University of Göttingen, where he was granted his habilitation in 1959. After being a scientific assistant of Prof. Franz Firbas at Göttingen from 1953 to 1961, Lange was docent at the botanical institute of the Technische Hochschule Darmstadt for 2 years. In 1963 he accepted the Chair of Forest Botany in the Forestry Faculty of the University of Göttingen at Hannover-Münden. In 1967 he went to the University of Würzburg and founded there the Lehrstuhl Botanik II. He resisted to offers of distinguished chairs at the Universities of Grenoble, Stuttgart-Hohenheim, Tübingen and Göttingen.

Lange's interest in lichens was aroused after he met the well-known amateur lichenologist Oskar Klement. Since the late forties Lange started collecting lichens and built up his lichen herbarium. One of his early highlights was the discovery and description of *Gonohymenia mauretanica* (1958), a result of his ecological studies in the Mauretanian desert carried out together with Professor Otto Stocker.

Lange can be considered as one of the first who laid the basis for our modern



Impressions of the IAL 2 Symposium in Båstad. Upper picture: part of the Council during the General Meeting; lower picture: Cecilia Lönngquist presents gifts from Lund University to IAL council members.

understanding of functions and adaptations of lichens in their habitats. He began his academic career with an investigation of the heat and drought tolerance of lichens and their relations to habitat conditions. His dissertation, published in *Flora* (1953), is still a well-cited publication. At first his studies were dedicated to the lichen responses to extreme temperatures and drought and investigations of the heavy metal content in lichens. Later he investigated the CO<sub>2</sub> exchange in lichens and the influence of major environmental parameters. Lange always used the highest technical standards for his instrumentation and stimulated application of new technical developments. His lichenological work received great attention from botanists in general.

Lange and his coworkers made several key discoveries for lichen physiology and ecology, for instance with respect to the water relations of this poikilohydrously living symbiosis. It was discovered that lichens are able to take up water vapour from the air (first published in 1965 in *Naturwissenschaften*). Many of his studies were devoted to this phenomenon in the laboratory and in the field, particularly in deserts (Namib, Negev, Chilean little North, Antarctic cold desert). Lange's studies on *Ramalina maciformis* and other species from the Negev desert in Israel became especially famous. Another milestone was the discovery that cyanolichens differ from green algae-lichens in that they cannot become photosynthetically activated by water vapour uptake (1985). Lange and co-workers also clarified the question whether and how many lichens reveal a reduced CO<sub>2</sub> uptake at superoptimal thallus water contents (1980). Elegantly conducted studies and sophisticated theoretical considerations were recently dedicated to the problem of a swelling-imposed reduction of net photosynthesis. He is also studying rainforest lichens of which our present knowledge is very poor. A lot of unexpected phenomena will come to light through these studies, as for instance already the discovery that rainforest lichens from New Zealand can be extremely sensitive to desiccation, and that their water relations are different from what we generally know about lichens. About 80 publications, about 27% of his whole oeuvre, are devoted to lichen research. And now, after his retirement, he intends to strengthen his interest in this subject.

Lange has been highly decorated with many honours. He received several orders, medals and prizes, and is a member of several Academies, including the Deutsche Akademie der Naturforscher Leopoldina (since 1976), the Bayerische Akademie der Wissenschaften, the Akademie der Wissenschaften in Göttingen (1978), and the Academia Scientiarum et Artium Europaea in Salzburg (1991). He was decorated with the Verdienstkreuz erste Klasse des Verdienstordens der Bundesrepublik Deutschland (1981), and the Bayerische Maximilian Orden für Wissenschaften und Kunst (1991). He was awarded the Förderpreis for German scientists within the G.W. Leibniz Programme of the German Science Foundation, the Balzan Award of Israel

for applied botany and ecology (1988) and the Adalbert-Seifritz Award for Technology Transfer (1990). He is an honorary member of the Regensburger Botanische Gesellschaft and of the British Lichen Society.

Otto Lange and his laboratory are most attractive to colleagues and lichenologists everywhere in the world. He is not only admired as an excellent, never failing experimentalist and scientist. He is also well known for his welcoming and delightful personality. Thus, he made his lab in Würzburg a Mecca for ecophysiologists and all other lichen researchers. I think many of us owe him the deepest gratitude for stimulating discussions, fair and fruitful cooperation, teaching and many kinds of help and support, so that it is self-evident to propose Otto L. Lange to be awarded by the Acharius Medal.

---Ludger Kappen

### Josef Poelt

The Acharius Medal is given "as an award in recognition of long and distinguished service to lichenology". Let us consider the three words: "long", "distinguished" and "service".

There are several aspects of Josef Poelt's SERVICE to lichenology. (1) First of course his advancing of our knowledge in lichenology — his participation in scientific research — led to a large number of publications, a most well known activity; however there are other, less obvious, but often very time-consuming types of service: (2) his service as an editor or coeditor of botanical and lichenological journals; (3) his service as an authority for a very large number of lichenologists, who have sent their problematic collections to him, for his study and opinions; (4) his service in reviewing manuscripts sent to him (a) by many authors, asking for critical comments, (b) by the editing boards of journals, (c) by various science-supporting organisations, such as "Deutsche Forschungsgemeinschaft", in connection with reviewing research grants, (d) by universities, asking for his expert opinion for various reasons; and (5) — last but not least — his service for the continuity of lichenological research — teaching and guiding students, both at universities and outside of the university.

Josef's "LONG service to lichenology". Research. It was in 1950 when Josef published a paper entitled "Contributions to the lichen flora of Bavaria". This was the first in a series of now more than 200 lichenological publications. Publications on floristics, taxonomy, morphology, evolution and biology of lichens. His *Bestimmungsschlüssel europäischer Flechten* is probably his most widely used publication. This collection of keys has long been a key reference work for students and professionals. Of course, since it was published only in German, it has been officially available only to speakers of that language; but I understand that some non-



German speakers may be fortunate enough to have an unofficial translation from "Xerox Press".

There are many outstanding monographical papers — for example those on the Lecanoraceae (18 papers), the Physciaceae (11 papers), the Teloschistaceae (15 papers) and various other taxa. Josef is not the type of scientist who devotes all of his years to the monographic study of a single taxonomic group. He has recognized too many weak points in too many areas of our knowledge and he has thus continually pushed our knowledge of lichens to new frontiers.

Teaching. Since achieving his "Habilitation" in 1959 (effectively his tenure), Josef has been a university lecturer. Although now retired, he continues to teach at the University of Graz. During these past 33 years, he shared his extensive knowledge of lichenology in guiding numerous students through their studies and advised many of them in their doctoral degrees. Some of his students in turn also became university lecturers, and so his "scientific family" is growing ever larger. In the meantime Josef has become a multiple scholastic "grandfather" and even a "great-grandfather". Most of you know Josef's responsibility, helpfulness, cordiality and hospitality well enough, so that I do not have to stress here, that he always behaved to his large family like a father, a father in the very best sense!

Josef's "DISTINGUISHED service to lichenology". Instead of giving a critical commentary I will cite here just a few of the honours which Josef has received, based upon his outstanding service to science: — In 1965 he received the chair in Systematic Botany and Plant Geography at the Free University of Berlin; — later, in 1972, he received the chair in Systematic Botany at the University of Graz; — in 1982 he was elected as a member of the Bavarian Academy of Sciences; — he has been elected as an Honorary Member of a number of distinguished botanical societies, including the Regensburg Botanical Society, the worlds oldest botanical society; — the Linnean Society in London elected him as a Foreign Member, which is an honour reserved for very distinguished scientists; — the Botanical Society of America has elected him as a Corresponding Member, which is also an honorary membership; — and most recently, as you know, Josef was the President of the 4th International Mycological Congress in Regensburg.

Most remarkable — and obvious to all who ever shared one of Josef's excursions — is his extremely broad background in plant systematics in general and in floristics. Besides his 200 lichenological papers, there are an additional 100 papers on bryophytes, non-lichenized fungi and vascular plants.

It is not appropriate to deal here with his extra-lichenological activities, but it is obvious the Josef is more than a lichenologist. He is an accomplished botanist with an immense knowledge of lichens.

Biological aspects, the correlations between structure and function, and the evo-

lutionary trends, have always guided Josef's research in lichen systematics. The parasitic lichens are a typical example of his interest. Josef has devoted some twenty papers to this subject. Before he started, "parasitic lichens" were regarded as a very small and very rare group of lichens, and remained almost completely devoid of general attention. Josef has not only discovered numerous new taxa, but has analyzed and clarified the very diverse and fascinating biological behaviour of quite a number of these exciting organisms.

*To sum up.* — Josef has substantially shaped the lichenological landscape of Europe during the last decades. His contribution to our knowledge of European lichens can hardly be overestimated. We all are happy to see the Acharius Medal presented to him.

--- Hannes Hertel

### Rolf Santesson

Professor Rolf Santesson began his lichenological studies as a schoolboy and the field work for one of his first papers, amphibious pyrenolichens, started in 1934. He was then only 18 years old. As teachers he had G. Einar Du Rietz, later Professor of Plant Ecology but also known as a lichen taxonomist, and Prof. Gunnar Degelius who will simultaneously be presented with the Acharius Award. Rolf Santesson often tells us that his first flora was Josef Anders' *Die Strauch- und Laubflechten Mitteleuropas* from 1928, to remind us about the advantage we have to be able to use another Josef's flora, Bestimmungsschlüssel europäischer Flechten.

In 1939 Rolf Santesson went to the southernmost region of South America on a planned 8 month expedition. Because of the second world war the expedition lasted almost two years. His companion was a zoologist, Claes Olrog, who published a book on the expedition. It is written in Swedish and gives a good account of the nature and people 50 years ago. For those of you who have recently been in Tierra del Fuego it will pay to study this book, even if you have to struggle with the Swedish language.

From the beginning Rolf Santesson was mainly an ecologist with strong taxonomical interests. After the South American trip he turned to mainly taxonomic treatments of the material he had collected there, resulting in the revision of several genera. His work on *Menegazzia* for example was an important and basic landmark in South American lichenology. This work was carried out at the Natural History Museum in Stockholm but in 1946 he left Stockholm for Uppsala to start his work on foliicolous lichens. In 1952 he published his magnum opus, Foliicolous lichens I, which I suppose most of you have consulted more than once. This seminal work helped lay the foundation of modern lichen taxonomy in its application to



lichens of Nannfeldt's new system for ascomycetes.

Teaching, curating work and supervision took most of Rolf Santesson's time after that and in 1973 he became professor and head of the Botanical Section of the Natural History Museum in Stockholm. He was successful in splitting the position into two, and cryptogamy got the first permanent position in Sweden; the Cryptogamic Botany Department with Rolf Santesson as the head, parallel with the Phanerogamic Botany Department. In 1982 he retired and since then we have had the privilege to see him at the Botanical Museum in Uppsala every day working as hard as ever on projects like the lichen parasites and his new edition of Lichens of Sweden and Norway which we soon hope to see.

As a teacher Rolf Santesson is one of the best. No problem is too small to interest him. I think many of us have gained from his generosity both concerning taxonomical problems and questions about literature and nomenclature and we know that many of you do the same in letters. A very common expression among us in Uppsala is: ask Rolf.

Those of us who have had the privilege to be with Rolf Santesson in the field know that he also has an outstanding floristic knowledge and is a master collector; the Uppsala herbarium is a good proof of that.

Rolf Santesson has definitely followed in the footsteps of Acharius, and has increased our knowledge of lichens considerably. Acharius himself would probably be very surprised to see the progress in lichenology, and would certainly agree that a worthier candidate for the Acharius Medal Award is difficult to find.

--- Roland Moberg

### John W. Thomson

For 50 years, North American lichenology and the name, John W. Thomson, have been almost synonymous. Starting modestly with treatments of *Cladonia* and *Peltigera* for his home state of Wisconsin in America's midwest, John Thomson has steadily built up his knowledge of the lichens of North America, and shared that knowledge through his many articles, monographs and books, now numbering close to 100.

Although John Thomson is as American a lichenologist as anyone can imagine, one may find it surprising that Grummann's book of biographies includes John among the lichenologists of Great Britain. John was, in fact, born in Cockenzie, Scotland, but you won't find a trace of Scottish in his accent, long since lost after arriving in North America as a youngster. John earned his bachelor's degree in 1935 from Columbia University, and then went to Wisconsin for his master's and doctoral degrees, the latter being conferred in 1939.

Lichenologists in North America sometimes feel a bit lonely ... after all, there

are more people working on lichens in Lund, for example, than in all of Canada... but try to imagine what it must have been like back in 1935 when John began his studies of lichens, or in 1944, when he took up a position in the Botany Department at the University of Wisconsin (a position he retained, by the way, until his retirement in 1987). There was only A.W.C.T. Herre, Carol Dodge, Alexander Evans, and perhaps a few others. Even Raymond Torrey, an early correspondent of John's, passed away in 1938. Impressed more by the opportunities to make real progress than discouraged by the lack of colleagues on the continent, John taught himself every kind of lichen from the smallest crust to the leafiest *Peltigera*. With John fast becoming known as the expert on lichens, he was naturally deluged with specimens for identification, sent to him for the most part by ecologists, naturalists and amateurs. I think it is fair to say that without his invaluable help during that period, lichens would have been virtually forgotten as an element of the North American flora. And he is still providing this service. The more lichens he named, of course, the more he got, and as a result, John has built the University of Wisconsin lichen herbarium into one of the largest and most important lichen collections on the continent.

John's impact on North American lichenology can be seen in the number of North American monographs and revisions he has produced over the years: *Peltigera*, *Cladonia*, *Physcia* in the broad sense, *Baeomyces*, *Rhizocarpon*, *Dactylina*, *Catapyrenium*, and, most recently, *Staurothele*. His monographs and shorter papers often include detailed dot maps showing the North American distributions of the lichens, and these have been enormously helpful to anyone interested in the phytogeography of American species.

To a significant extent, our floristic knowledge of American lichens has been built upon John Thomson's many authoritative reports of the lichens collected on the yearly forays of the American Bryological and Lichenological Society, often providing the first and, in some cases, still our only knowledge of the lichens in some parts of the continent. These reports cover areas in Oklahoma, Pennsylvania, northern Minnesota, California, Indiana, the Adirondacks of New York, and Washington. Some of the larger collections sent to him for determination, especially by the Canadian ecologist George Scotter, led to other significant floristic papers.

Beginning in the mid-50s, John contributed tremendously to our knowledge of the lichens of the American arctic, first dealing with the Hudson Bay region and the Canadian Eastern Arctic; and later, treating the lichens collected on numerous northern expeditions. This interest grew as John found opportunities to go north himself and sample firsthand the lichenological riches of that still underexplored land. These collecting trips have resulted in landmark books, first his lichen flora of the Alaskan Arctic Slope, and then an award-winning volume on the macroli-

chens of the entire American Arctic. We all await anxiously the appearance of the second volume, on the crustose species, due to be published next year.

John Thomson has been a teacher all his life, and has influenced a large number of people with his enthusiasm for lichens, as well as his warmth and generosity. He is always happy to share his knowledge with amateurs and professionals alike. Among his many students were Mason Hale and Bill Culberson who, themselves, have made a significant impact on North American lichenology. We all owe a great deal to John Thomson, and it is very fitting that he is among the first to receive an Acharius Medal.

--- Irwin M. Brodo

### Hans Trass

Professor Hans Trass is from one of the newest independent states of the world, namely Estonia. He is a distinguished lichenologist and botanist, having competence in many different fields. He was born in 1928 and studied at Tartu University. His candidate's thesis - which in the Soviet system actually corresponded to a doctoral thesis in most countries - was completed in 1955, and dealt with the fen flora and vegetation of western Estonia. He had already been the head of the Department of Plant Systematics and Geobotany of the Tartu University for more than ten years when, in 1969, he finished his official Doctor's thesis, entitled "The analysis of the Estonian lichen flora". In 1971 he became a Professor, and although he recently retired from his position as a head of the department, he is still continuing his work.

Besides his Ph.D. thesis Hans has published numerous other papers on lichens from 1956 on. Nevertheless, for much of the time lichenology has been just a sideline for him. He was often engaged in studies of vegetation ecology, publishing in 1976, for instance, a major book: Vegetation science: history and contemporary trends of development, originally published in Russian. In 1973 he wrote a major article on vegetation classification in the Handbook of Vegetation Science edited by R.H. Whittaker. He studied the lichen flora of Estonia, but also led expeditions to remote areas of Russia, such as the Murmansk Region, Kamchatka, Sikhote-Alin Range and other areas in the Far East, Lake Baikal and Taymir Peninsula in Siberia, Kazakhstan and the Caucasus Mts. He especially promoted the study of lichens as pollution monitors, e.g. in 1968 with a paper entitled "An index for the utilization of lichen groups to determine air pollution". He developed his own Index of Poleotolerance (IP) based on lichens, and several students of his are continuing the work, for instance Kristjan Zobel, who completed his Ph.D. thesis under Trass this year. Hans also contributed to the Handbook of the Lichens of the USSR by publishing the accounts of three families in it.

In addition, Hans has always kept numerous direct contacts with lichenologists all over the world, also travelling and working abroad, for instance in Canada, Germany, Sweden and Finland. He maintained good relations with Russian and western lichenologists, often acting as a bridge of knowledge between them, to the benefit of lichenology. In the east he was known for his excellent lichen library and to Russian students was regarded as a "western professor".

To honour his lichenological research, his effective teaching, which has produced numerous lichenologists in Estonia and elsewhere in the former Soviet Union, and for his most useful activities in promoting international cooperation in lichenology, it is appropriate that he receives an Acharius Medal.

--- Teuvo Ahti

### Antonin Vezda

The life of A. Vezda (born 1920 in Brno, Czechoslovakia) was strongly influenced by political troubles. During the first world war, he was not allowed to go to university and had to act as a manager of a fruit company. In 1945 he began his academic studies at the University of Brno. Later he changed to the University of Forestry. He finished his studies with the doctoral diploma and became an assistant. Already he had a strong interest in plants, especially those of small dimensions. The decision to study lichens and not bryophytes was made because some younger botanists in Czechoslovakia already had begun to work with bryophytes. Antonin first undertook floristic studies within the country, some with a strong ecological emphasis. However, he soon became interested in taxonomy. He began with monographical studies of groups which were, at that time, united within the artificial family Gyalectaceae.

In 1960 he was suddenly expelled from the University, because he was not a communist, and he had to act as a forest worker until 1968. Even during this time he tried, whenever possible, to follow his scientific interests. For example, he discovered and diligently analysed the lichen which later became the type species of the genus *Vezdaea*, dedicated to him.

From 1968, when he had already published many papers which made him well-known in the lichenological world, he became a worker at the Czechoslovakian Academy of Sciences at Prague, and he was allowed to do his work in his apartment in Brno.

In the following years Antonin published many outstanding lichenological papers. He contributed in a second essential field to the growth of lichenology. Already in his first years, he had published his "Lichenes Cechoslovakiae exsiccati", most of which he had collected himself in his own country. Later he initiated what became the largest lichen exsiccati ever to appear: his famous "Lichenes selecti ex-

siccati", with altogether 2500 numbers originating from many parts of the world. Fortunate is the institute which possesses a set!

Through his exsiccata, he became acquainted with lichens from the whole world. It is no wonder that he became interested in travelling outside his own country and some surrounding regions, which he was allowed to visit a few times. But only some parts of the (former) Soviet Union were open to him to visit and to do lichenological work. For several reasons he selected the Caucasus mountains, and especially the very humid southwestern slopes, well known formerly as Colchis. Here he became acquainted with a very special group of lichens, which continue to fascinate him today: the foliicolous lichens, treated by R. Santesson 1952 in a worldwide monograph. Antonin studied his own collections and received other material from different subtropical and tropical countries, sent by his many friends. Following the changing taxonomic concepts of our time, he described both many new species and new genera. But his most important contribution was understanding and analyzing the very peculiar organs for asexual reproduction that are formed in these lichens, hyphophores and campylidia. As he had done in his previous monographs, he illustrated his studies with his outstanding, perfect drawings, unique in modern lichenology. And his work goes on, many new taxa wait to become described by him.

When Antonin ended his "Lichenes selecti exsiccati", he first decided to stop assembling exsiccata altogether. But making exsiccata had become a part of his life. He started with a third series "Lichenes rariores exsiccati", though with a smaller number of sets. Several times on excursions, he had made up his mind to collect nothing for his exsiccata. But then he saw the first interesting species in sufficient quantity and he could not resist: "I must take it", he said, and soon another number was collected.

Antonin Vezda made essential contributions to modern lichenology: by his taxonomic monographs, by his exsiccata, by his unsurpassed drawings, and by his studies of foliicolous lichens. But he always had another botanical interest as well, bulbous plants, which he cultivated in his own garden near Brno. He received material from many parts of the world, and grew those plants from seed to flower and seed again. Sometimes this field of botany fascinated him even more than the lichens. Fortunately the flowering season of bulbous plants is usually very short and the garden work with propagation did not take up too much time, so lichenology remained his main field, in which his outstanding contributions made him a convincing candidate for the Acharius medal.

--- J. Poelt

## Peter James

"Last but by no means least" - indeed, Peter was the first President of the IAL, and its Acting Treasurer, from 1969 to 1975. Further back in time he was another "first" - a founder member of the British Lichen Society in 1958. In that same year, following National Service, Peter began work as a lichenologist at the British Museum (Natural History). Also in that year, he became the first editor of The Lichenologist, continuing into the 1970s, and taking the journal from its humble beginnings to it becoming the leading international professional journal that it is today.

Editing in those days was much more difficult than today - there were fewer referees available and no such luxuries as word processors and desk-top publishers. He gave tremendous help to many authors, with regard to both scientific content, and to English correction, and he often "burnt the midnight oil" retyping manuscripts. Further evidence of Peter's contribution to lichenology can be seen by turning to the Acknowledgements of hundreds of papers by dozens of authors. I know that many of us here are personally grateful for the help and encouragement that Peter has given so freely.

Many of Peter's publications are landmarks in the recent history of lichenology. Of his earlier works are his "New checklist of British Lichens" (1965) and his major contribution to Ursula Duncan's Introduction to British Lichens (1970) - both were a major stimulus to lichen taxonomy and field-studies in NW Europe. Other landmarks include, for example, his paper on cephalodia (with Aino Henssen, 1976), the preliminary prospectus of lichen communities in the British Isles (with David Hawksworth and Francis Rose, 1977), and the monographs on *Nephroma* (with Joy White, 1987, 1988). Next to come are the publication of his studies on *Menegazzia*, and the appearance, in November 1992, of the long-awaited Lichen Flora of Great Britain and Ireland, of which Peter has been co-editor and a senior contributor.

Peter is primarily a taxonomist, but his enthusiasm for field-work, and his vast field experience in most parts of the world, have lead to his involvement in much wider areas of lichenology, including ecology, phytosociology, pollution studies and conservation. He has always been a patient yet effective teacher, not only to the several doctoral students that have come under his wing, but also to the scores of amateurs who have benefitted from his knowledge and enthusiasm during his many field courses and workshops at home and abroad.

On behalf of us here today, and of Peter's many other lichenological friends throughout the world, it is a great pleasure and honour for me to propose the award of the Acharius Medal to Peter James, a Gentleman of Lichenology.

--- Brian Coppins

## New Literature

André APTROOT. 1993. Systematic studies on pyrenocarpous lichens and related fungi. 48 pages. Published by the author. (Forms a complement to the monograph on the Pyrenulaceae from the same author, see ILN 23(2), p. 31; contains a general chapter on the cladistic method in lichens, results of transmission electron microscopical studies of distoseptate spores in three pyrenocarpous lichens, results of cultivation experiments with about ten species and a discussion on the significance of anamorphs in lichens).

David J. GALLOWAY. 1992. Studies in Pseudocyphellaria (lichens) III. The South American species. Bibliotheca Lichenologica 46. 275 pages and 44 plates. Published by J. Cramer in der Gebrüder Borntraeger Verlagsbuchhandlung, Berlin & Stuttgart. (Detailed taxonomic treatment of 53 species (7 new) occurring in southern Chile, Argentina and the Falkland islands (Malvinas); each species with synonymy, differentiation, chemistry, distribution map, world distribution, list of specimens, some with description and photograph; including a key and general chapters on history, morphology, ecology, chemistry, etc.).

Trevor GOWARD & Teuvo AHTI. 1992. Macrolichens and their zonal distribution in Wells Gray Provincial Park and its vicinity, British Columbia, Canada. Acta Botanica Fennica 147. 60 pages. (Lists 293 taxa; several new for Canada or North America; for each details of ecology and distribution are given; with introductory chapters on the area and collection sites, and discussion of diversity, geographic patterns, zonation).

Otto L. LANGE. 1992. Pflanzenleben unter Streß. Flechten als Pioniere der Vegetation an Extremstandorten der Erde. Rostra Universitatis Würzburgensis VI. 59 pages. Universität Würzburg. Available from: Zentralverwaltung der Universität, z. Hd. von Herrn Pütz, Sanderring 2, 8700 Würzburg; price DM 15. (A nicely illustrated, general account of ecophysiological research on lichens done by the author and his collaborators).

O. W. PURVIS, B. J. COPPINS, D. L. HAWKSWORTH, P. W. JAMES & D. M. MOORE. 1992. The Lichen Flora of Great Britain and Ireland. 710 pages. Published by the Natural History Museum, London, in association with The British Lichen Society. (An identification book for all (over 1700) lichens occurring in

the British Isles; contains keys, descriptions, indications of chemistry, distribution, ecology; based on recent revisions of British material, and using modern taxonomic concepts; the short introductory chapters deal mainly with the questions where to find them and how to observe the required characters; an illustrated glossary and an extensive literature list are given at the end; because a large part of the lichen flora of Europe and adjacent areas occurs on the British Isles, especially the commoner species, the book will be very useful to students all over Europe).

Gerhard RAMBOLD & Dagmar TRIEBEL. 1992. The Inter-lecanoralean Associations. Bibliotheca Lichenologica 48. 201 pages. Published by J. Cramer in der Gebrüder Borntraeger Verlagsbuchhandlung, Berlin & Stuttgart. (Deals with lichenicolous lichenized or non-lichenized fungi, especially those belonging to the order Lecanorales in a redefined, wide sense; contains lists of all known Lecanorales growing lichenicolous on Lecanorales, those on non-Lecanorales, and non-Lecanoralean lichenicoles growing on Lecanorales; introductory chapters present statistical information on various aspects of lichenicoles, such as taxonomy of hosts, ecology, chemistry).

S. STENROOS, L. I. FERRARO & T. Ahti. 1992. Lichenes Lecanorales: Cladoniaceae. Flora criptogámica de Tierra del Fuego (Eds. S. A. Guarrera, I. Gamundi de Amos & C. M. Materi) T. XIII, Fasc. 7. 111 pages. (Detailed taxonomic treatment, based on numerous herbarium collections and field work by the authors, of 1 species of *Cladia*, 1 species of *Metus*, 45 species of *Cladonia* and 5 species of *Cladina*, with keys, descriptions, information on chemistry, habit drawings; in Spanish).

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