

Cover photo: *Ephebe lanata* (L.) Vain. from A. Henssen, Symb. Bot. Upsal. 18(1): 1-123. 1963. Drawing by J. Induss.

Vol. 10 No. 1

April 1977

international lichenological newsletter

Editor: Irwin M. Brodo

National Museums of Canada
Ottawa, Ontario K1A 0M8
Canada

Editorial

The Happy Invasion

A quarter of a century ago, when I began my career in lichenology, the vast concentration of research on lichens was in Scandinavia and everyone was a taxonomist. Lichenology and lichen taxonomy were almost synonymous. The outstanding exception was the greatest lichenologist of that period, Yasuhiko Asahina, who was neither European nor entirely a systematist. To be sure much nontaxonomic research on lichens was also done at that time--ecological, phytogeographic, floristic, morphological, and anatomical--but the lichenologists making such studies, I think, primarily considered themselves to be systematists (Vernon Ahmadjian, a notable exception). This was true even among the young people entering lichenology via nonsystematic studies. For example, Mason Hale and I both did ecological research for our theses, but we considered ourselves to be systematists even though most of what we had written then was not primarily systematic. In this respect we were typical of most lichenologists--both young and old--of that time. The situation, however, is certainly very different now.

The breadth of lichenological research today is truly impressive. The field has been widened, not primarily by workers who consider themselves to be systematists but rather by the happy invasion of lichenology by botanists who come from physiology and ecology. In preparing lectures recently for the lichenology course that Chicita and I teach at Duke, I reflected on how vastly expanded our knowledge of the lichen has become, especially in the recent years. As a systematist I want to use the oppor-

The *International Lichenological Newsletter* is the official organ of the International Association for Lichenology. Membership is open to anyone who has an active interest in lichenology. Dues are \$5-\$10 per 6 years and should be sent to the Association's treasurer (see Vol. 9 no. 1, p. 16). News items intended for the *Newsletter* may be forwarded to the editor.

The affairs of the International Association for Lichenology are directed by an Executive Council consisting of Teuvo Ahti, president, Rolf Santesson, vice-president, Thomas Nash III, secretary, Hannes Hertel, treasurer, Irwin Brodo, editor, as well as Hans Trass and Oleg Blum. They will serve until the next International Botanical Congress.

tunity afforded by the invitation of this editorial to salute the brilliant work now being done by my fellow but nonsystematic lichenologists.

Over the last seventeen years David C. Smith, formerly of Oxford University and now of the University of Bristol, and his co-workers have produced a series of articles that have revolutionized our concept of lichen physiology. Their major contribution has been the investigation of the chemical form in which food passes from alga to fungus, a formerly baffling problem now readily studiable thanks to the inhibition technique, an elegant procedure of great precision and simplicity that Smith and E.A. Drew invented ten years ago. Always concerned about the broad significance of discoveries from his own laboratory and elsewhere, Smith regularly writes exemplary review articles of great clarity, integrating the new information into the broadest biological framework.

Just last year, J.F. Farrar, one of Smith's students, published a series of articles a major thrust of which is the new concept of "physiological buffering" in lichens. This notion postulates that the maintenance of a large polyol pool in the lichen uses up most of the products of photosynthesis, thereby leaving little food for growth and explaining in part the notoriously slow growth rates of these organisms. Although this polyol pool is partly lost by leakage upon rewetting of the thallus, it may function primarily as a substrate for respiration in times of stress, thereby sparing valuable proteins from metabolic attack. A fascinating idea.

An ecological explanation of the slow growth of lichens comes from what is perhaps the most elegant research that has ever been carried out in all of physiological ecology, the work of Otto Lange of the University of Würzburg. His now classical studies concern the day-by-day and hour-by-hour fluctuations in photosynthesis and respiration as functions of the level of thallus hydration in *Ramalina maciformis*, a species of the Negev Desert that gets water from moisture-laden night air. Lange's work goes far in explaining the precarious carbon balance in lichens living in extreme environments, and stands apart as a model of excellence in technological methodology.

In a series of papers in the Canadian Journal of Botany under the general title of "Studies on lichen-dominated systems," K.A. Kershaw and his co-workers are trying to make ecological sense out of the thousands of hectares of the scientifically ignored lichen lands of the Canadian North. They have considered such diverse aspects of ecology as water relations, net assimilation rates under various conditions, topographic influences on microclimate and resulting species distributions, the ecological significance of thallus color, and temperature and humidity profiles within fruticose thallus mats. Only last year D.W. Larson and Kershaw published what I consider to be that group's most significant finding thus far, namely that (contrary to what we have always thought) there actually appears to be a level of plant control over water loss in lichens—not by anatomical structure as in vascular plants but rather by gross thallus morphology. The potential for evolutionary studies (and, yes, systematic studies too!) opened by this discovery is enormous.

Lichenology, once the private domaine of taxonomists, is now the hunting ground of botanists of diverse persuasions. Only a lack of space prevents me from extending further the list of outstanding physiologists and ecologists now working on lichens. The science has never been more active in imaginative research nor more intellectually viable. Hurrah for the nonsystematists!

- William Louis Culberson

News and Notes

AHMADJIAN, V. (U.S.A.) continues his studies of *Trebouxia* and *Pseudo-trebouxia* as well as his experimental work on lichen symbionts and synthesis. Among other things he will examine the effects of blue-green and green phycobiont extracts on the hyphal morphology of the mycobiont in culture. Attempts will be made to isolate the fungal and algal (green and blue-green) symbionts of *Stereocaulon* species and use them as test organisms. His teaching duties of the past year involved developing a new course on Symbiosis at Clark University.

Dr. Ahmadjian has copies available of the following article for those members of the Association who are interested: Schofield, E. and Ahmadjian, V. 1973. Field observations and laboratory studies of some Antarctic cold desert cryptogams. In, Antarctic Terrestrial Biology, Antarctic Research Series, vol. 20, pp. 97-142.

AHTI, T. (Finland) visited the Leningrad herbarium in September 1976, studying Mongolian lichens. At present he is mainly working on Brazilian and Venezuelan *Cladonia* and on the *Cladonia gracilis* group. With G.W. SCOTTER (Canada) he is also preparing a list of lichens in Nahanni National Park, N.W.T., Canada. Dr. Ahti will spend one month in May-June 1977 in the Muséum National d'Histoire Naturelle, Paris studying material of *Cladonia*, especially "exotic" species. In the summer of 1977 he is planning to do some field work in Canada besides taking part in the 2nd Intern. Mycol. Congress.

Recent lichenological theses finished in the Dept. of Botany, University of Helsinki; under the direction of Dr. Ahti are as follows:

LAAKSOVIRTA, K. 1976: The effect of air pollutants on the lichen vegetation on pine bark and on the element contents of *Hypogymnia physodes* and pine needles in Kokkola, W. Finland (Lic. Phil.)

LESKINEN, P. 1976: The epiphytic lichens on pine as indicators of air pollution in western Helsinki and eastern Espoo. (M.Sc.)

OKSANEN, L. 1976: The effect of summer and winter grazing by reindeer on the lichen-tundra vegetation of northern Finnmarksvidda, Norwegian Lapland (part of a Lic. Phil. thesis; in English).

TOIKKA, A. 1975: The occurrence of lichens on pine trunks in relation to air pollution in eastern Helsinki (M.Sc.)

BIRD, Charles D. (Canada) is working on a lichen flora of the Mackenzie Valley, Northwest Territories, with J.W. THOMSON (USA) and G.W. SCOTTER (Canada). It is envisaged as a two or three year project and will include ecological observations. A revision of *Dactylina* in North America and Greenland has been submitted for publication (with J.W. THOMSON as co-author).

BRODO, Irwin M. (Canada) having completed a revision of the genus *Alectoria* s. lat. (with David Hawksworth) is returning to his studies of the *Lecanora subfusca* group in North America as well as his work on the lichens of the Queen Charlotte Islands (British Columbia). He will be engaging in two weeks of collecting in the interior Rocky Mountains of northern British Columbia before attending the A.I.B.S. meetings in Michigan and International Mycological Congress in Tampa.

COLE, Mariette (U.S.A.), a student of Dr. J.W. Thomson, will be finishing her Ph.D. thesis in May 1977 on the cryptogamic epiphytes of the Kickapoo River Valley in the "Driftless Area" of Wisconsin.

CULBERSON, William L. (U.S.A.) spent his sabbatical leave last fall together with CHICITA CULBERSON (his wife) in their lab at Duke University finishing up a number of manuscripts of work done previously but not written up. They, and their assistant ANITA JOHNSON, finished the *Second Supplement to 'Chemical and Botanical Guide to Lichen Products'* which will appear this spring as a special publication of the American Bryological and Lichenological Society. Bill and Chicita spent December and early January collecting large quantities of lichens in Costa Rica, Guatemala, and Mexico.

FOLLMANN, Gerhard (B.R.D.) taught a two-week lichen course for post-graduate students at the University of La Laguna, Tenerife, Canary Islands, in March 1977. Afterwards he guided a lichenofloristical and lichenosociological case-study on the Island of Hierro, being the least man-influenced island of the Atlantic archipelago.

FURTEK, Douglas (U.S.A.) is an M.A. candidate at Clark University working on the induction of lichen substances in isolated mycobionts growing in culture and in resynthesized lichen cultures. He is using a mass spectrometer to determine the presence of any lichen substances in these cultures.

GUY, Graeme (New Zealand) is investigating the effects of pollution from a new coal-fired power station near Waikato (Hamilton) on the surrounding lichens.

HENSSEN, A. (B.R.D.) did field work together with P. JAMES (U.K.) in the Azores in March 1976, and took part in the excursion to southern France in July. The British Museum and some herbaria in Sweden and Finland were visited in summer and fall, respectively. In October she gave a guest lecture in Vienna on the ascocarp ontogeny in cyanophilic lichen.

JØRGENSEN, PER M. is now assistant director of the Botanical Garden in Bergen, Norway. He has recently finished a manuscript on the lichens of the Norwegian Tristan da Cunha Expedition 1937-38. This is the largest known collection from the islands (kept in Q). During this year he hopes to finish the first part of the monograph on Pannariaceae, containing the European species.

JAMES, Peter W. (U.K.) has recently returned from a collecting trip to Ascension Island. He is currently writing on the typification of species of *Ramalina* and *Usnea* and other genera in Britain and NW Europe as well as writing up a monograph of *Menegazzia*. A revision of Duncan's "Introduction to British Lichens" and a new checklist of British lichens are also under way.

KALLIO, Sinikka (Finland) defended her printed Ph.D. thesis entitled "Studies on elemental nitrogen fixation in lichens in North Finland" in the Dept. of Botany, University of Turku in February 1977. (She is prof. Paavo KALLIO's daughter-in-law).

KEUCK, G. (Chile/B.R.D.) finished his Ph.D. thesis (under the guidance of A. HENSSEN) in July at the University of Marburg. The thesis, an ontogenetic-taxonomic study of *Eriodermis* in comparison to other cyanophilic lichen genera, will be published by Cramer in the *Bibliotheca Lichenologica*.

LAUNDON, J.R. (U.K.) is completing an index on the abbreviations and herbaria of deceased lichenologists. His taxonomic account of the *Lecanora varia* group is now at an advanced stage of preparation, and he is also engaged in a revision of the species of *Lepraria* s. lat.

LAWREY, James D. (U.S.A.) is currently working on the adaptive significance of lichen compounds in competitive situations with other cryptogams under field and laboratory conditions. He is also doing x-ray diffraction microanalysis studies and SEM studies of lichen mycobionts and phycobionts to see if partitioning of elements, particularly metals, occurs under natural conditions.

LECHOWICZ, Martin (Canada) finished his Ph.D. dissertation at University of Wisconsin, Madison in July 1976 under the direction of Michael Adams. It is titled "Environmental Response Structure of *Cladonia* Lichens from Contrasting Climates". Using two morphologically similar species (*C. alpestris (stellaris)* and *C. evansii*), he considered the relationship between climatic regime and lichen net CO₂ exchange responses. The results will be published in *Ecological Monographs*. Overall, he is interested in trying to predict optimal net CO₂ exchange responses in lichen populations as a function of climatic regime. Analysis of the effects of thallus form on the coupling between lichen condition and climatic variables is a prerequisite to these ecophysiological predictions. Dr. Lechowicz would welcome correspondence from anyone with complimentary interests.

NEWBERRY, Gillian (U.S.A.) finished her Ph.D. thesis on the lichens and bryophytes of northern Wisconsin bogs in 1976 and has taken a position as Assistant Professor of Botany at the University of South Carolina Spartanburg. She worked under Dr. J.W. Thomson at the University of Wisconsin.

ROSENTHAL, Roger (U.S.A.) completed a M.A. degree with the thesis on "The Effect of Ozone on the lichen *Cladonia arbuscula* and on the *Trebouxia* phycobiont of *Cladonia alpestris*".

SLOCUM, Bob (U.S.A.) recently completed a paper examining the nature of the fungus-alga association in the Dictyonemataceae (Basidiolichens). He plans to continue the study of this family and would appreciate

receiving specimens of these and other basidiolichens. Mr. Slocum will be finishing his M.Sc. thesis this spring. It involved an electron-microscopic (EM) investigation of the effects of SO_2 on chloroplast organization in the *Trebouzia* phycobiont of the pollution-sensitive lichen *Parmelia caperata* and turned up some interesting results. He will then begin his Ph.D. studies at the Dep't of Botany, Univ. of Texas, Austin with Garry T. Cole examining the process of ascosporegenesis in the lichenized species of the Teloschistaceae using EM.

SØCHTING, U. (Denmark) is continuing studies on air pollution indication with lichens, and is currently investigating relationships between lichens and mites.

THOMSON, John W. (U.S.A.) is continuing his work on the genus *Staurothele* in North America and would welcome loans of herbarium material of that genus.

WOLF, Susan (U.S.A.) a graduate student at the University of Wisconsin, has made a preliminary study of the epiphytic lichens of the area around the Columbia County (Wisconsin) coal-fired power plant prior to its entering operation. The report will be published soon and will serve as a baseline study in measuring later pollution effects.

XAVIER FILHO, Lauro (Brasil) will spend 1976-1979 at the Catedra de Fisiologia Vegetal, Universidad Complutense de Madrid, Spain, studying lichen physiology under the guidance of Prof. Dr. Carlos Vicente Cordoba. The study involves at least primarily the urease system in the metabolic processes of lichen symbioses.

Books

Lichenology: Progress and Problems. D.H. Brown, D.L. Hawksworth, and R.H. Bailey (Editors). 551 pages. 1976. Academic Press, London, New York, San Francisco. £ 14.25 to members of the British Lichen Society). This important volume describes recent progress in some of the more important fields of modern lichenological research emphasizing areas still in need of study. The twenty chapters cover most subjects in lichenology.

Les champignons lichénicoles non lichénisés. G. Clauzade et C. Roux. 110 feuilles. 1976. Montpellier. 15 fr (F). (Les commandes doivent être adressées à: Université des Sciences et Techniques du Languedoc; Laboratoire de Systématique et Géobotanique Méditerranéenne; Institut de Botanique; 5, rue Auguste Broussonet; Montpellier, France.)

Si les Champignons lichénicoles lichénisés sont relativement bien connus, il n'en est pas de même pour les Champignons lichénicoles non lichénisés, pour lesquels on ne dispose que de documents fragmentaires ou anciens. L'ouvrage de G. CLAUZADE et C. ROUX, qui présente une clé de détermination détaillée de l'ensemble des espèces recensées dans le monde jusqu'à 1976, vient donc supprimer une lacune importante, et sera d'une grande utilité

pour les mycologues et pour les lichénologues. Il convient en outre de souligner l'effort qui a été fait par les auteurs pour proposer un ouvrage de prix modique.

Meetings

American Bryological and Lichenological Society

The A.B.L.S. will meet at Michigan State University, East Lansing with sessions of special interest to lichenologists taking place 22-24 August. On the 22nd, there will be a full day symposium on *Bryology and Lichenology in Austral Islands* convened by Dr. Henry Imshaug who has made extensive studies and collections in the southern hemisphere. Systematic Aspects (morning session) as well as Ecological and Phytogeographical Aspects (afternoon session) will be covered. On the 23rd, and possibly the morning of the 24th, contributed papers in lichenology will be presented. Write to I. Brodo for registration forms and information.

Second International Mycological Congress

As noted in the last issue of the Newsletter (9(2):9-10), the I.A.L. has prepared a substantial lichenological programme at the IMC-2 including four half-day symposia, an evening workshop, and one of the Congress's principal speakers (David Smith). Anyone who has not yet received the Second (final) Circular and application form for IMC-2 should write to Dr. Melvin Fuller, IMC-2, Office of the Secretary, Department of Botany, University of Georgia, Athens, Georgia 30602, U.S.A. Space does not permit a complete listing of the proposed symposium speakers and topics, but the I.A.L. program committee representative, Irwin M. Brodo, will send the most up-to-date listing to anyone requesting one.

International Association for Lichenology - General Meeting

A general meeting for all members of the I.A.L. will take place at the International Mycological Congress in Tampa, Florida, in August. Participants in the Congress will be notified of the time and place. Included in the agenda will be: the proposed I.A.L. constitution, early arrangements for the XIII International Botanical Congress in Sidney (1981), and, most important, plans for the Second I.A.L. Field Meeting. (The first took place in Austria in 1973.) Tom Nash, secretary of the I.A.L., is collecting comments and opinions concerning the three possible sites of the trip: the Canary Islands, Venezuela, or Costa Rica, and would like to know of anyone who might be able to attend (depending on where it occurs, of course). This information will greatly facilitate the discussion in Tampa. *Please send your comments to him as soon as possible.*

Societies

The American Bryological and Lichenological Society

recently established its first Lichen Exchange with Claire Schmitt as Director. Students as well as professionals who are interested in exchanging specimens are invited to participate whether or not they are members of the A.B.L.S. Interested persons may write to Mrs. Schmitt at 1 Cedar Lane, Scotia, New York 12302 USA for information.

Excursion Lichenologique en Provence Occidentale, et dans La Vallée du Rhone

Cette excursion, la première organisée par l'Association française de Lichénologie, s'est déroulée du 2 au 8 Juillet 1976 sous la direction de G. CLAUZADE et C. ROUX, avec la participation de J. ASTA, J.C. BOISSIERE, E. BARRENO, A. CRESPO, C. DELZENNE, S. DERUELLE, A. HENSSEN, R. ISERENTANT, M.C. JANEX, R. LALLEMANT, M. LEROND, M.A. LETROUIT, X. LLIMONA, J. MARGOT, L. MASSE, S. REMY, R. RIEUX, G. RITCHELL, C. ROUX, U. SÖCHTING, M. VAILLAUD, S. VALTAT. Les sites visités ont permis aux participants de récolter de nombreux Lichens calcicoles, mais aussi des Lichens calcifuges, corticoles, et terricoles. Le choix de ces sites a permis d'observer un certain nombre d'Associations lichéniques d'affinités méditerranéennes, africaines ou steppiques.

- R. Lallemand

Excursions

British Lichen Society

Buckinghamshire, 20-22 April: Little studied sites in the central and northern portions of the county will be visited under the leadership of D.L. Hawksworth. The meeting will be centred in Aylesbury. Participants will meet at the Bell Hotel (Market Square) at 9.30 on the 20th. Contact Dr. Hawksworth (C.M.I., Kew, Surrey, U.K.) or the B.L.S. for more information.

Day excursion to Kent, 8 May: This trip, to be held jointly with the Kent Field Club, will be led by F.H. Brightman and J.R. Laundon. All groups of plants will be studied on walls in Romney Marsh. Meet at Ashford Station, Kent, at 11.00.

Summer field meeting in the Lake District, 13-20 July: The epiphytic woodland lichens of the Lake District have already been well studied; this meeting will concentrate on the little-known areas of higher fells and corries. Some strenuous walking is involved. The headquarters and meeting place is Old Brathay at the Brathay Field Study Centre at Ambleside, Cumbria. The excursion will be led by Dr. Pauline Topham and Mr. F.R. Gomm.

Summer field meeting in the Scottish Borders, 20-27 July: Brian Coppins, Royal Botanic Gardens, Edinburgh EH3 5LR, will lead this trip which will be centred in Melrose and will start at the Burts Hotel at 9.30 on the 21st. Contact Mr. Coppins or the B.L.S. for more details on accommodations, etc.

LICHEN EXCURSIONS IN THE UNITED STATES, SUMMER 1977

Northern Michigan, with American Bryological and Lichenological Society, 19-21 August.

The annual A.B.L.S. Foray, to be held prior to the Society's meetings in East Lansing, Michigan (with the American Institute of Biological Sciences (A.I.B.S.)), will centre around the town of Pellston where the University of Michigan has a biological Station ("Douglas Lake"). The two day field trip will begin with a visit to Michigan's upper peninsula to observe upland forest types and limestone occurrences. The second day will include travel to lowland forests (including bogs) near Pellston. The cost will not exceed \$30 including everything (accommodation for 2 nights, meals, transportation in the Pellston area). Some very low cost accommodation is available (at the dormitories) and one can cut costs further by bringing a sleeping bag. More standard sleeping quarters with private or shared bath are also available but make reservations early for these. Details can be secured from the field trip leader, Dr. Richard C. Harris, University of Michigan Herbarium, North University Building, Ann Arbor. The trip will have to be limited to 50 people (including bryologists). The schedule will be as follows:

- 19 Aug., 7:30 p.m. (Dining Hall, Douglas Lake Biol. Station):
Meet for a pre-foray briefing, and general get-together.
- 20 Aug. 8:00 a.m. (Dining Hall). Leave for 1st day's excursion.
- 21 Aug. 8:00 a.m. (Dining Hall). Leave for second day's excursion.
12:00-1:00 Depart by private auto for East Lansing. (Share costs with driver).

Pellston, Michigan can be reached by air using North Central Airlines: two flights per day from Detroit, one per day from Chicago. Make your connections via Chicago or Detroit accordingly.

Smoky Mountains of Tennessee and central Florida, U.S.A., 24-28 August.

The I.A.L. Pre-Congress Excursion will take place in two quite different regions. First, a day and a half will be spent exploring the deciduous woodlands in and around Great Smoky Mountain National Park noted for its phytogeographically interesting southern Appalachian flora and may include a climb to a high elevation conifer stand if time permits. The second portion will centre around Orlando, Florida, where there will be an opportunity to collect in the very rich "hammocks" known for tropical species, as well as the pine-palmetto white sand habitats, extremely rich in terricolous and corticolous species. The excursion will be limited to 43 participants. Tentative plans are as follows:

24 Aug.: Those participants travelling from the A.I.B.S. meetings in East Lansing will travel to Knoxville by plane, leaving Lansing at 13.25*(NC 807*) and arriving in Knoxville at 18.07 via Detroit (DL 557). A limousine will take participants directly to Clement Hall at the University of Tennessee campus where most or all will be accommodated. After gathering at the Clement Hall lobby at 19.30, everyone will go to a meeting room near the herbarium (Hesler Biology Building) for a pre-foray discussion and presentation conducted by the field trip leader, Dr. Mason Hale.

Those travelling from places other than East Lansing should also go to Clement Hall for a room assignment and then meet at 19.30 for the pre-foray discussion mentioned above.

25 Aug. 8.00: Meet at Clement Hall for full day trip to Smoky Mt. hardwood forests. Transportation will be by chartered bus.

26 Aug. 8.00: Meet for trip to a contrasting locality (to be decided upon later). Return to campus by 15.30. After an early supper, travel to airport for an 18.27 flight to Orlando via Atlanta (DL 557 and EA 327) arriving 21.27.

Take a taxi to "Best Western Motel" (Winter Park, Florida) whether arriving with Knoxville group or arriving from elsewhere.

27 Aug. 8.00: Leave from motel for full day of collecting in hammock localities. A chartered bus will provide transportation.

28 Aug. 7.30: Morning excursion near Florida Tech. University in white sand-pine forest. Leave for Tampa after lunch. Arrive at University of South Florida at 14.00 in time for IMC plenary session at 15.00.

* Flight times and numbers are not based on the summer schedules and may be changed. Check with the field trip leaders for the final information.

The field trip leader for the Smoky Mountain and Florida excursions is Dr. Mason E. Hale, Department of Botany, Smithsonian Institution, Washington, D.C. 20560, U.S.A. He will be assisted in Tennessee by Dr. David K. Smith, Dep't of Botany, University of Tennessee; and in Florida by Dr. Harvey Miller, Florida Technological University.

IMPORTANT NOTE: It is absolutely essential that those wishing to participate in the above trips (Michigan and/or SE U.S.) contact the field trip leaders as soon as possible if you haven't already notified I. Brodo. They must have a list of those intending to attend (even if some drop out later) so that sleeping accommodations and transportation can be arranged. You should make your own flight arrangements according to details provided by the leaders.

Estimated costs for lichenological activities related to the Second International Mycological Congress, Tampa, Florida, 1977.

1. Field excursion to northern Michigan, American Bryological and Lichenological Society (ABLS), 19-21 August (all costs)	\$ 40.	
2. A.B.L.S. scientific sessions with the meetings of the American Institute for Biological Sciences (ABLS), East Lansing, Michigan, 21-24 August		
a. A.I.B.S. Registration	\$ 25.00	
b. Rooms, 3 nights at \$17	51.00	
c. Meals, 3 days at \$12	<u>36.00</u>	
	Subtotal AIBS meeting	112.
3. Excursion to Smoky Mountains (Tennessee) and central Florida sponsored by the International Association for Lichenology, 24-28 August		
a. Air fare, East Lansing - Knoxville	70.00	
b. Room and meals at University of Tennessee, 2 nights, 2 days	35.00	
c. Chartered bus & airport transportation in Knoxville area	25.00	
d. Air fare, Knoxville-Orlando	67.00	
e. Motel room, Orlando, 2 nights at \$15	30.00	
f. Meals, 2 days, at \$12	24.00	
g. Bus charter, Orlando area and trip to Tampa	<u>20.00</u>	
	Subtotal IAL Excursion	271.
4. International Mycological Congress, 28 Aug.-3 Sept.		
a. Registration	60.00	
b. Housing, 7 nights at ca. \$7.00	50.00	
c. Meals (meal plan), \$35 per week	<u>35.00</u>	
	Subtotal, IMC	145.
	<i>Total</i>	<u>\$558.</u>

Herbaria

New York Botanical Garden

Recently almost 500 specimens from the herbarium of William Mitten (1819-1906) were found at the New York Botanical Garden. Most of the specimens have been tentatively identified to genus and are now available for study at the Garden. Mitten was a good friend of Sir William Hooker and received lichens through Hooker from collectors who travelled to many different parts of the world.

Views

Lectotypification - borrowing types.

It is not only T. Ahti who has reacted to Hale's statement about lectotypification in *Smithsonian Contr. Botany* 22:19 (1975). I was very surprised to read it, and I am sorry Mason - it is not in accordance with article 8 as you cite it in 9(2):12.

Hale's statement is: "It should be emphasized that selection of lectotypes is not binding on later workers. The Code allows us to lectotypify a species again if better evidence can be produced to support the change. This may happen, for example, when a second worker discovers a specimen in another collection that is in better condition or is more-appropriate than the previously designated lectotype".

A statement according to the Code would more appropriately be: "It should be emphasized that the lectotypes must be chosen with great care as the choice is binding on later workers, except in some special cases. It is not sufficient that the new type specimen is better developed or more appropriate. It must be possible for a second worker to *prove* that the first choice is not in accordance with the protologue. This is often very difficult as old diagnoses can be interpreted in many ways."

May I add: Relectotypification should be avoided if possible, as a step towards stabilization of the nomenclature. In some cases it is inevitable, but in my experience they are few. According to Hale's view in 9(2):12 it would seem that his former statement must be considered a slip of the pen; as he obviously had no intention to create a new interpretation of the Code.

After these critical remarks, I am glad to say that I agree in nearly every detail with Hale's view on "ethics of borrowing type specimens". Every responsible worker should take a copy of these five points and pin them at eyeheight at his or her desk. I would like to introduce an additional point:

6. *Do return type specimens when they are due.* Nothing is more frustrating than when type-specimens which you need are on loan to someone else, especially when he/she has had them for twenty years. This is a bad example of undermining others' research, and it causes the herbaria a great deal of trouble as well. The rigorous and time-consuming routine now followed by BM is certainly a result of this situation. Our attitude towards type specimens must be altered. One should not immediately request the loan of types, when a problem appears. They cannot solve it at once and usually have to be put aside for later consultations. Types should be borrowed after one has a clear opinion of the taxa involved, only to establish their correct names, and this need not take much time.

- Per M. Jørgensen

More on nomenclatural starting-points

I read G. Salisbury's article in 9(2): 13 many times to be certain that there was nothing wrong with my knowledge of English or my logic. As far as I can understand, Salisbury means that a species epithet (contrary to a generic name) must follow the rules of the group in which it is described. Such a view would bring about much nomenclatural-trouble, and lead to many illogical results. But neither Salisbury's nor my opinion of logic matters in this case. The Code must give the answer, and it is clear on this point. The note to article 13, pinpointing the starting-point for all groups, says: "The group to which a name is assigned for the purposes of this article is determined by the accepted taxonomic position of the type of the name". It should be noted that this refers to *all* names at any rank. To make this even clearer there are two examples one of which concerns *Lycopodium* which was listed among the Musci when described by Linnaeus 1753 (Musci starting-point 1801). As it is currently accepted as a pteridophyte (starting-point 1753) "the generic name and the names of the pteridophyte *species*... were validly published in 1753" (my underlining).

There is accordingly no doubt that Ahti's statement is correct.

- Per M. Jørgensen

It would be interesting to have comments from various specialists on what seems to be a rather dogmatic statement in ILN 9(2):13. The fact that "fungi are already dichotomized into lichenized and non-lichenized genera" would itself seem to indicate a point of view which cannot logically be upheld, and to which most competent modern mycologists and lichenologists no longer adhere. If one may make an equally dogmatic statement, but one more likely to be true, the difference is purely a physiological one and not valid for taxonomic purposes.

- Elke Mackenzie

Back Issues

Members who are interested in back issues of the Newsletter may write to Dr. V. Ahmadjian for copies (gratis). He still has a modest supply of the following numbers of the Newsletter: Vol.2(2), Vol.3(1&2), Vol.4(1&2), Vol.5(1&2), Vol.6(1&2), Vol.7(1&2), Vol.8(1&2).

Editor's Comments

In preparing the last mailing of the Newsletter, I organized the envelopes according to country and discovered that I had an excellent summary of the national origins of the I.A.L. membership. I found it interesting and thought the readers might also. I brought the list up-to-date to include new members.

AFRICA		NORTH and CENTRAL AMERICA		France	26
Ethiopia	1	Canada	22	Germany (BRD)	31
South Africa	1	Costa Rica	1	Germany (DDR)	2
Tanzania	1	Mexico	1	Hungary	2
		United States	98	Iceland	1
ASIA and the MIDDLE EAST				Ireland	2
China (P.R.C.)	1	SOUTH AMERICA		Italy	2
China (Taiwan)	1	Argentina	1	Jugoslavia	1
Hong Kong	1	Brazil	1	Norway	9
India	5	Chile	2	Poland	8
Israel	2	Peru	1	Romania	4
Japan	14	Uruguay	1	Soviet Union	
Mongolian P.R.	1	Venezuela	1	Estonia	6
Pakistan	1			Kazakhstan	1
		EUROPE		Latvia	1
AUSTRALASIA		Austria	6	Russia	8
Australia	4	Belgium	6	Tajikistan	1
New Zealand	7	Bulgaria	1	Ukraine	3
Tasmania	1	Czechoslovakia	5	Spain	5
		Denmark	3	Sweden	14
		Finland	19	Switzerland	7
				United Kingdom	34

Although the coverage of the world is rather good, some areas seem to be under-represented or not represented at all (e.g., the Arab nations). If anyone knows of lichenologists from these countries, let us know and we will send them a copy of the Newsletter and invite them to join.

It should be noted that *all* active lichenologists known to us are on our present list whether or not they have paid the I.A.L. dues. Obviously, the Association cannot continue to send newsletters to non-members and it is likely that this will be the last general mailing. The Association plans to send a copy of the present *complete* address list to all paid-up members in the near future, and will continue to send updated lists from time to time. The I.A.L. council sincerely hopes that those on the present mailing list will pay their dues soon, if they haven't already done so, so that future lists will be just as complete as this one.

Exsiccatae

A New Exsiccata of Western North American Lichens

The first fascicle of a new exsiccata, entitled "LICHENS OF WESTERN NORTH AMERICA", was published in November 1976. The exsiccata will be issued in a minimum of 20 complete sets in fascicles of 25 numbers. The exsiccata will initially emphasize the lichens of the Southern Rocky Mountains and Colorado Plateau. However, as the title indicates, lichens from any part of western North America, including the Black Hills of Wyoming and South Dakota, but excluding Mexico, will be issued as they are available.

Several species included in the first fascicle have not been previously reported for North America. They are: *Acarospora nitida*, *Buellia contermina*, *Caloplaca chrysodeta*, *Lecanora intrudens*, *Lecanora reagens*, *Lecidea extenuata*, *Psora scholanderi*, *Rhizocarpon renneri*, *Teloschistes contortuplicatus*, and *Toninia bullata*.

Individuals who wish to contribute to the exsiccata are welcome to do so and will be fully acknowledged. Among those who will be receiving a complete set of the first fascicle are the following: BM, CANL, COLO, DUKE, FH, H, M, O, Poelt, UPS, US, and Vězda. Other institutions and curators of private herbaria who are interested in receiving sets of the exsiccata, complete or incomplete, should contact Dr. Roger A. Anderson (U.S.A.).



XII INTERNATIONAL BOTANICAL CONGRESS
LENINGRAD - 1975
(Legend on inside back cover)



Scientific sessions on lichenology, XII International Botanical Congress

Photos by Taimi Piinn. Individuals listed left to right.

1. Peter James, Vernon Ahmadjian;
2. Ove Alborn;
3. David Richardson
4. (unidentified), Klara Verseggy, Mme K.A. Rassadina, Margaluth Galun, Nina Golubkova, (unidentified);
5. Aino Henssen, Rolf Santesson, Vernon Ahmadjian;
6. Oleg Blum;
7. Marie-Agnes Letrouit.