international lichenological newsletter

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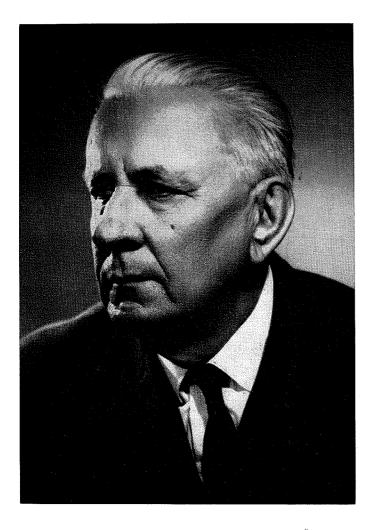
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Editorial

Another Lichen Book

Many lichen books have been published in recent years. I know of at least twenty books which have appeared in the past ten years that deal primarily with lichens. Not along ago a person interested in these associations could turn to only a few outdated works. Now there are books on taxonomy, ecology, physiology and chemistry. The future is for even more volumes. Symbiosis as a biological phenomenon has attracted much interest because of recent theories which propose a symbiotic origin for cell organelles such as mitochondria and chloroplasts. Certainly lichens, the prime examples of symbiosis, will attract new workers because of this interest. The books we have now and those being planned will serve as a foundation to support the increased number of workers in the future.

There has not been a comprehensive treatment of lichens since the one by Annie Lorraine Smith in 1921. Because so much information has accumulated since that time, it's doubtful that one individual could now cover adequately all facets of lichen studies. There are too many specialists. What is needed is a multi-authored volume on lichens, a book with chapters written by specialists who represent the major areas of



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Dr. Josef Motyka, professor at Marie Sklodowska-Curie University in Lublin, celebrated his 70th birthday in March 1970. The name of this distinguished scientist is connected mainly with his excellent monograph of Usnea, resulting in Dr. Motyka becoming the foremost specialist in that genus. He has published a number of papers on Alectoria, Ramalina, and other macrolichen genera and is now preparing a monograph of the European species of Lecanora. Less known but no less important are his papers pioneering the ecology and phytosociology of saxicolous and corticolous lichens. All of these works have gained him a prominent position in lichenology. Because of his many papers and students, he is considered the "father" of Polish lichenology.

The idea for a new lichen book originated from one of the editors of the four volume work THE FUNGI. The editor suggested to the Academic Press that a book on lichens be published which would complement the fungal volumes. The reason why lichens were not included directly with the fungal series is not clear. According to one editor, the omission was unintentional—that is, a chapter assigned to cover lichens was not submitted on time by the proposed author. However, the other editor indicated that the omission was intentional—that there was enough to worry about without becoming involved with lichens. From my view it would have been far better to have a fifth volume in the fungal series which would deal with lichens rather than perpetuate the artificial separation of lichen fungi from the remainder of the fungi. Someday this union will come about, as a natural consequence of our increasing knowledge and better understanding of these organisms and the acceptance of a separate kingdom for the fungi. However, for the present, we do have a lichen book in preparation and we are optimistic that it will be a valid successor to the classic one by Annie Lorraine Smith.

Vernon Ahmadiian

Research Notes

Research Notes—News

Hale, M. E. (U.S.A.)—While photographing colonies of Parmelia caperata for growth studies, I observed an epidemic invasion by springtails (Collembola) which completely ate the upper cortex and algal layer of the thalli over extensive areas (up to 400 cm²), in a period of just three weeks during October of this year. The epidemic may have been the result of a prolonged dry spell. I would be interested in hearing of similar observations that anyone has been able to make on insect damage to lichens.

Lauro, X. F. (Brazil)—In 1955, Estola and Vartia studied the ability of 10% saline extracts of lichens to agglutinate various red blood cells. Out of the 100 species studied, 8% revealed agglutinins; however, they were not specific for the ABO, MN, Pp, or Le blood groups. My colleagues and I are studying agglutinations of extracts from basidiolichens collected in Brazil. We have found beautiful agglutination in blood groups A, B, AB, and O. The lichens tested included Cora pavonia (Sw.) Fr., Corella brasiliensis Vainio, Dictyonema sericeum (Sw.) Berk., and Herpothallon sanguineum (Sw.) Tobl.

Bailey, R. H. (England)—Left Cheltenham to join the Department of Extra-Mural Studies, University of London, 7 Ridgemount Street, London, W.C.1.

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Brown, D. H. (England)—I am now the Librarian and Reading Circle Secretary for the British Lichen Society, having taken over the duties from D. C. Smith. I would be most grateful to receive copies of papers, reviews, etc., of lichenological interest for inclusion in the Library. As a result of past generosity the Library now contains over 1,000 items. A detailed catalogue, which is brought up to date at regular intervals, is available from the Librarian.

Clauzade, G. (France)—Continue ses recherches lichénologiques, de floristique, phytosociologie et écologie, en Provence calcaire où existent de nombreuses espèces de lichens jusqu'ici inconnues en France.

Dodge, C. W. (U.S.A.)—Beginning work on the Stictaceae of the western hemisphere north of Chile and Argentina.

Feige, B. (Germany)—Meine neue Adresse lautet: Botanisches Institut der Universität Köln, 5-Köln 41, Gyrhofstrasse 15. Die Untersuchungen zum Stoffwechsel der Flechten, insbesondere von Cladonia convoluta (Lam.) P. Cout. und Roccella fucoides (Dicks.) Vain. werden weitergefürt. Eine vorläufige Mitteilung über die physiologischen Wirkungen der Usninsäure auf den Stoffwechsel der einzelligen Alge Ankistrodesmus braunii befindet sich in Vorbereitung. Im Druck befindliche Publikationen: 1. Zur Verwertung uniform ¹⁴C-markierter Glukose und uniform ¹⁴C-markierten Glycerins durch die Flechte Cladonia convoluta. 2. Markierungsprodukte verschiedener Flechtenspezies nach Inkubation mit ¹⁴C-Bicarbonat, ³²P-Orthophosphat und ³⁵S-Sulfat (57 Spezies).

Gilbert, O. L. (England)—Have left Newcastle to take up a post as lecturer in the Department of Landscape Architecture, the University, Sheffield SIO 2TN, England.

Hawksworth, D. L. (England)—Received Ph. D. degree from the University of Leicester for a thesis on the British species of Alectoria. Now working on a revision of the North American species of this genus with I. M. Brodo. A new checklist and provisional key have been prepared and we are currently revising major North American herbaria not yet examined by us. We hope to publish revisions of the southern and central African and British species of Alectoria during 1971. Engaged in a detailed account of the chemical races of Pseudevernia furfuracea (with D. S. Chapman) and other macrolichens in Britain, and continuing studies on the effects of air pollution on British lichens (with F. Rose). Alectoria specimens from anywhere for exchange or determination will be greatly appreciated.

Imshaug, H. A. (U.S.A.)—The following are students at Michigan State University working under H. A. Imshaug: Richard Harris (a revision of the lichenized and nonlichenized North American species of Arthopyrenia); Ronald Taylor (a study of the littoral lichens of northeastern America, including regions of New England, Nova Scotia, and Newfoundland); and Karl Ohlsson (a chemo-taxonomic study of the genus Sphaerophorus). Ismael Landron received his Ph. D. this year on a revision of Ramalina in the West Indies.

Jacobs, J. B. (U.S.A.)—Completed a fine structural study of Cladonia cristatella, the intact lichen and its isolated symbionts. Paper has been submitted for publication. Currently writing my Ph.D. dissertation at Clark University while teaching courses in electron microscopy and related techniques to M.D. and Ph.D. residents in pathology at St. Vincent Hospital in Worcester, Mass.

Jones, M. P. (England)—Continuing research on the ecology of lichens and bryophytes in the Algarve, Portugal, at the Chelsea College of Science and Technology, Univ. of London, under a grant from the Gulbenkian Foundation.

Krog, H. (Norway)—Continuing studies of arctic lichens. In July I spent two weeks of field work on Spitsbergen, mainly in the Kings Bay and Cross Bay region, and in September I had the opportunity to make a brief visit to Jan Mayen. On July 1, I joined the staff of the Norwegian Institute for Air Research (NILU), P.O. Box 15, 2007 Kjeller. However, until further notice it will be more convenient for me to receive mail at the address given in the last *Newsletter* mailing.

Morgan-Huws, D. I. (England)—Completing work with F. N. Haynes on the use of epiphytic lichens as pollution indicators. Have produced a scale of sensitivity using a number of lichens common to southern Britain which are easily recognizable by nonprofessional workers. Particularly interested in the mechanisms of lichen disappearance under gradually increasing pollution. Disappearance could be due to failure of regeneration from propagules, due to modified substrate conditions,

rather than by direct thallus damage. Interested in the chemistry of Evernia prunastri (L.) Ach. and would welcome (on loan) material determined as "usnic acid absent" (Evernia herinii Duvign.) from anywhere, and accompanied by E. prunastri (usnic acid present) where both grow together.

Nakanishi, S. (Japan)—Received a Ministry of Education Fellowship to study lichen and bryophyte communities in North America; in October I visited colleagues in Ottawa and Washington and am now working in the Southern Appalachians from the University of Tennessee until the summer of 1971.

Savicz, V. P. (U.S.S.R.)—Preparing the next decas of the "Lichenotheca Rossica." With A. V. Dombrovskaja treating the family Peltigeraceae for the "Determination-book of Lichens" in Russian. Continuing to collaborate with N. S. Golubkova on a treatment of the lichens collected from the Soviet sector of Antarctica. Writing reviews of world lichenological literature for the Soviet abstract magazine "Biology," printed in Moscow. During the summer of 1969, I investigated lichens at the Khibins in Kola Peninsula and prepared material for the "Lichenotheca Rossica" exsiccate. Will exchange willingly lichen duplicates and reprints of papers. This year I celebrated my 85th birthday.

Steiner, M. (Germany)—Large collections were made during a guest professorship with the Science Faculty of the University of Kabul, Afganistan, April to August, 1970. Field trips covered large parts of northern and northeastern Afganistan. Special attention was given to epiphytic lichens. I plan to issue a "Lichenes Afghanici Exsiccati."

Wetmore, C. (U.S.A.)—Spent last summer working on ultrastructure of *Heppia* with V. Ahmadjian at Clark University and plan to continue research there this summer.

Wong, P. Y. (Canada)—Recently received a Master's Degree from Queens University, Kingston, Ontario, under R. Beschel. Have accepted a position as curatorial assistant in the lichenology section of the National Museums of Canada, Museum of Natural Sciences.

Awards

Dr. U. K. Duncan is to be congratulated on being awarded the honorary degree of Doctor of Letters (Litt.D.) by Dundee University.

Mr. Peter James has been elected to the Council of the Linnean Society of London.

Views

I would like to see in some future issue of *ILN* a listing of all world societies which invite the membership of lichenologists and/or give a large share of their space to lichenological articles. To insure a uniform format we should send the appropriate presidents or editors a form which would solicit information pertaining to the organization and its publication.

—I. M. Brodo

Meetings

The American Bryological and Lichenological Society will meet at Edmonton, Canada, 20-24 June 1971, under the auspices of the A.I.B.S. and the Canadian Botanical Association. A pre-session foray will be held in the adjacent Rocky Mountain foothills. Details may be obtained from Dr. Paul Redfearn, Southwest Missouri State College, Springfield, Missouri, U.S.A. 65805.

The 1st International Mycological Congress is to be held at Exeter, Devon, England, from 7-16 September 1971. This includes papers on various aspects of lichenology, especially chemotaxonomy, ascus and ascocarp structure and ontogeny and air pollution. Invited speakers include C. F. Culberson, C. H. Fox, M.-A. Letrouit, A. Henssen, O. L. Gilbert, D. L. Hawksworth, F. LeBlanc, T. Nash, F. Rose, J. R. Laundon, and J. Lambinon. A precongress field meeting organized by the British Lichen Society

is to be held from 1-7 September 1971 based on Ilfracombe. Further details may be obtained from Prof. J. Webster, Department of Biological Sciences, The University, Exeter, Devon EX4 4PS.

The British Lichen Society has held field meetings in Leicestershire, Brittany, Yorkshire, and Northumberland during the past year. The Society were particularly honoured that Prof. H. des Abbayes was able to attend parts of the Brittany field meeting, which was also joined by A. Henssen, J. Lambinon, and J. C. Masse.

Literature Reviews

D. L. Hawksworth (with W. B. Cooke) has published A Preliminary List of the Families Proposed for Fungi (including the Lichens), as Mycological Paper no. 121 of the Commonwealth Mycological Institute, Kew. This treatment should be of interest to all lichen taxonomists. The authors ernestly solicit suggestions and corrections.—M. E. Hale

A supplement to the book Chemical and Botanical Guide to Lichen Products by Chicita F. Culberson is now available. It summarizes information from an additional 295 papers, primarily from 1965 to 1968, but many from 1969 as well. This four-year summary is almost one-third the length of the original book. The supplement was published in the vol. 73, no. 2 Bryologist (1970) and separates can be ordered from Lewis E. Anderson, Department of Botany, Duke University, Durham, North Carolina 27706, at \$4.00 per copy.—W. L. Culberson

New Books

The Lichen Flora of Israel, by Margalit Galun. The Israel Academy of Sciences and Humanities, Jerusalem, 1970; 116 pp. and 28 plates. This book provides lichenologists with the first comprehensive treatment of the difficult desert lichen flora

of Israel and is probably useful for all of the Middle East region. Keys and exhaustive descriptions are supplemented by an excellent series of photographs.—M. Hale

Introduction to British Lichens, by U. K. Duncan and P. W. James. T. Buncle & Co., Arbroath, Scotland, 1970; 292 pp. and 128 plates, £3 12s 6d (£3.65). This book with its lucidly presented keys, brief descriptions (which include notes on ecology and distribution), and line illustrations, provides British students with the standard text they have been needing for so long. It will provide further impetus to the British lichens. —D. L. Hawksworth

Note

The Hattori Botanical Laboratory in Nichinan, Japan, celebrates its 25th anniversary in March, 1971, As most of you know, this laboratory has vigorously promoted bryology in Japan and has lately also supported lichenological research, including publication of several lichen articles in the *Journal of the Hattori Botanical Laboratory*.

Cover: Coronate apothecium of *Parmelia circumnodata* Nyl. X20. Drawing by N. Halliday

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