

Editorial	
L. MUGGIA, S. MARTELLO and M. TRETIACH	A Special Issue dedicated to Professor Pier Luigi Nimis
Laudatio	
M. TRETIACH	Pier Luigi Nimis: a life for lichens
Perspective	
L. ZEDDA	The importance of a transformative biodiversity education for perceiving, appreciating and supporting lichen diversity in German urban environments
Standard Papers	
T. R. KINGE, J. M. JEFWA, R. D. HOUDANON, H. M. KAMALEBO, A. M. ABDEL-AZEEM, M. GRYZENHOUT, D. TRIEBEL, T. WEIBULAT and G. RAMBOLD	Management and publication of scientific data on traditional mycological and lichenological knowledge in Africa
R. LÜCKING, B. MONCADA and M. DAL FORNO	<i>PhyloKey</i> : a novel method to rapidly and reliably identify species in complex, species-rich genera, and an opportunity for 'non-molecular museomics' Can we trust iNaturalist in lichenology? Evaluating the effectiveness and reliability of artificial intelligence in lichen identification
S. MUNZI, D. ISOCRONO and S. RAVERA	Towards a dynamic checklist of lichen-forming, lichenicolous and allied fungi of Ecuador – using the <i>Consortium of Lichen Herbaria</i> to manage fungal biodiversity in a megadiverse country
A. YÁNEZ-AYABACA, Á. BENÍTEZ, R. B. MOLINA, D. NARANJO, J. ETAYO, M. PRIETO, G. CEVALLOS, E. CAICEDO, K. SCHARNAGL, B. MCNERLIN, S. SWANSON, G. ARAGÓN, N. FERNÁNDEZ-PRADO, I. MARTÍNEZ, A. R. BURGAZ, Y. GONZÁLEZ, J. DÉLEG, M. VEGA, P. VAN DEN BOOM, N. MAGAIN, F. NUGRA, T. OÑA, P. J. DÍAZ, J. VILLALBA-ALEMAN, B. MONCADA, J. HERNÁNDEZ, E. E. GILBERT and F. BUNGARTZ	Five new species in the <i>Tremella caloplacae</i> complex
S. FREIRE-RALLO, P. DIEDERICH, A. M. MILLANES and M. WEDIN	<i>Arthonia epipolytropa</i> and <i>Arthonia subclemens</i> , two new lichenicolous species on <i>Lecanora polytropa</i> , with a key to the microfungi known on this common species
J. HAFELLNER and M. GRUBE	Phylogenetic insight into the <i>Lecidea atrobrunnea</i> complex – evidence of narrow geographic endemism and the pressing need for integrative taxonomic revisions
N. ANANTAPRAYOON, J. HOLLINGER, A. ROBISON, E. KRAICHAK, H. ROOT and S. D. LEAVITT	Using morphological, chemical, and molecular data to study the diversity of <i>Xanthoparmelia</i> species from South Africa (<i>Ascomycota, Parmeliaceae</i>)
A. BARCENAS-PEÑA, H. J. M. SIPMAN, V. WIRTH, F. GREWE and H. T. LUMBSCH	High diversity of <i>Bacidia</i> (<i>Ramalinaceae, Lecanorales</i>) species in the Caucasus as revealed by molecular and morphological analyses
J. V. GERASIMOVA, V. OTTE, I. N. URBANAVICHENE, G. P. URBANAVICHUS and A. BECK	The genus <i>Schaereria</i> Körb. in Australia
G. KANTVILAS	<i>Coenogonium nimisii</i> – a new isidiate epiphytic lichen similar to <i>Porina rosei</i>
J. MALÍČEK, B. COPPINS, Z. PALICE, L. VANČUROVÁ, J. VONDRAK and N. SANDERSON	Towards a nomenclatural clarification of the <i>Peltigera ponojensis/monticola</i> clade including metagenomic sequencing of type material and the introduction of <i>P. globulata</i> Miadl. & Magain sp. nov.
J. MIADLKOWSKA, N. MAGAIN, I. D. MEDEIROS, C. J. PARDO-DE LA HOZ, I. CARBONE, S. LAGRECA, T. BARLOW, L. MYLLYS, M. SCHMULL and F. LUTZONI	A distinctive new species of <i>Biatora</i> (<i>Ramalinaceae, Lecanorales</i>) described from native European forests
Z. PALICE, J. MALÍČEK, J. VONDRAK and C. PRINTZEN	<i>Nimisora</i> (<i>Lecanoraceae, Ascomycota</i>), a new genus for a common lecideoid epiphytic species from the central Iberian Peninsula
S. PÉREZ-ORTEGA, Y. TURÉGANO, M. SVENSSON and J. C. ZAMORA	Independent, structurally distinct transitions to microfruticose growth in the crustose genus <i>Porina</i> (<i>Ostropales, Lecanoromycetes</i>): new isidiate species from south-western Florida
W. SANDERS, R. DE CAROLIS, D. ERTZ, A. DE LOS RÍOS and L. MUGGIA	<i>Circmaria nimisii</i> (<i>Megasporeaceae, lichenized Ascomycota</i>), a new manna lichen from Greece
M. SOHRABI, S. D. LEAVITT, W. OBERMAYER and H. MAYRHOFER	<i>Marchantiana pyramus</i> , <i>M. ramulicola</i> and <i>Austropilopha thisbe</i> (<i>Teloschistaceae</i> , lichenized Ascomycota) – three new twig lichens from southern Patagonia
U. SOCHTING, L. G. SANCHIO and U. ARUP	<i>Punctelia borreri</i> and <i>P. subridecta</i> (<i>Parmeliaceae</i>) associate with a partially overlapping pool of <i>Trebouxia gelatinosa</i> lineages
I. GARRIDO-BENAVENT, M. R. MORA-RODRÍGUEZ, S. CHIVA, S. FOS and E. BARRENO	Growth-dependent acclimation constrains climatic response for the lichen epiphyte
E. V. CHINNERY and C. J. ELLIS	<i>Lobaria pulmonaria</i>
S. E. FAVERO-LONGO, E. MATTEUCCI, D. CASTELLI, P. IACOMUSSI, L. MARTIRE, M. G. RUGGIERO and A. SEGIMIRO	An ecological investigation on lichens and other lithobionts colonizing rock art in Valle Camonica (UNESCO WHS n. 94) addresses preventive conservation strategies
L. FRATI and G. BRUNIALTI	Natura 2000 network enhances the protection of rare epiphytic lichens: evidence from forest sites of Central Italy
G. GHEZA, L. DI NUZZO, P. GIORDANI, A. CHIARUCCI, R. BENESPERI, E. BIANCHI, G. CANALI, L. FRANCESCONI, C. VALLÈSE and J. NASCIMBENE	Species-area relationship in lichens tested in protected areas across Italy
Short Communication	
H. J. M. SIPMAN and Á. RAMÍREZ ORDAYA	An ITS sequence of a specimen from the probable <i>locus classicus</i> of <i>Ramalina peruviana</i> and its consequences

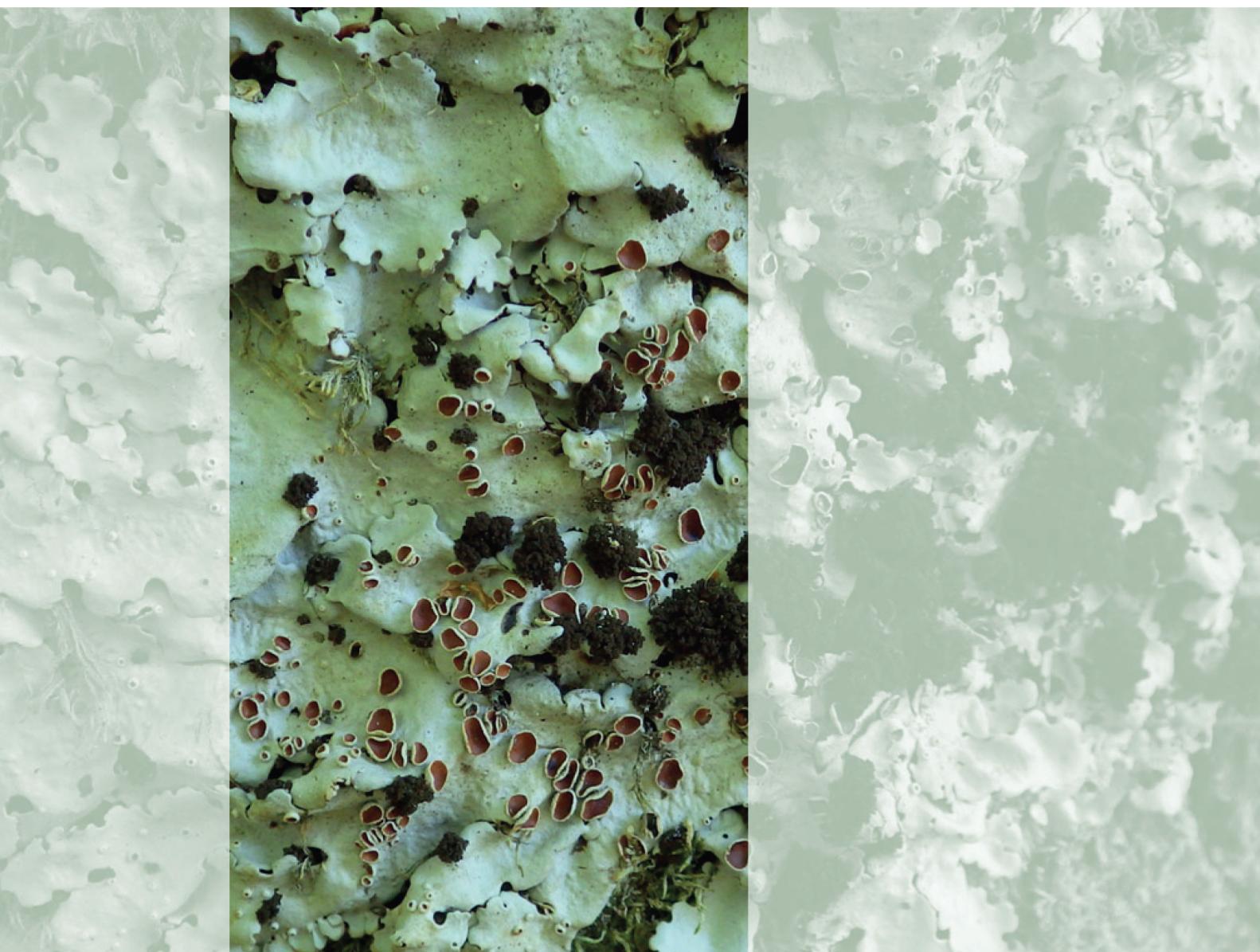
The Lichenologist, Vol. 55, Part 5 was published on 22 September 2023

Cambridge Core
For further information about this journal and our **Open Access option** please go to the journal website at: cambridge.org/lic



CAMBRIDGE
UNIVERSITY PRESS

The Lichenologist



ISSN 0024 2829

CAMBRIDGE
UNIVERSITY PRESS

The Lichenologist

AN INTERNATIONAL JOURNAL
PUBLISHED FOR THE BRITISH LICHEN SOCIETY

Senior Editors

C. J. ELLIS (Edinburgh, UK)
L. MYLLYS (Helsinki, Finland)

Editors

J. E. TAYLOR-Managing (Edinburgh, UK)
R. P. BECKETT (Scottsville, RSA)
M. DAL FORNO (Texas, USA)
P. DIEDERICH (Luxembourg)
S. EKMAN (Uppsala, Sweden)
D. ERTZ (Meise, Belgium)
A. M. FRYDAY (East Lansing, USA)
P. GIORDANI (Genoa, Italy)
C. GUEIDAN (Canberra, Australia)
R. LÜCKING (Berlin, Germany)

S. PÉREZ-ORTEGA (Madrid, Spain)
C. PRINTZEN (Frankfurt, Germany)
T. RANDLANE (Tartu, Estonia)
L. G. SANCHO (Madrid, Spain)
T. SPRIBILLE (Edmonton, Canada)
J. E. TAYLOR-Book Reviews (Edinburgh, UK)
M. WEDIN (Stockholm, Sweden)
S. WILL-WOLF (Madison, USA)
R. YAHР (Edinburgh, UK)

AIMS AND SCOPE

The Lichenologist publishes original research papers and review articles on all aspects of lichenology. There are no page charges for contributions. All papers are submitted to peer-review.

SUBMISSION OF MANUSCRIPTS

Manuscripts must be original, clearly and precisely presented in English and submitted electronically to *The Lichenologist* ScholarOne website <http://mc.manuscriptcentral.com/lich> following the on-screen instructions. Please consult the Instructions for Authors published in the back of each issue and on journals.cambridge.org/lic

ADVERTISING

Address enquiries in the USA, Mexico and Canada only to: journals_advertising@cup.org
For all other parts of the world except USA, Canada and Mexico to: ad_sales@cambridge.org

SUBSCRIPTIONS

The Lichenologist (ISSN 0024-2829) is published six times a year (one volume per annum) in January, March, May, July, September and November. Volume 55 will appear in 2023. The 2023 subscription price (excluding VAT but including delivery by air where appropriate) of a volume, which includes print and electronic access to institutions, is £1350 (US\$2452 in USA, Canada and Mexico). The electronic-only price available to institutional subscribers is £865 (US\$1557 in USA, Canada and Mexico). The print-only price available to institutional subscribers is £1289 (US\$2342 in USA, Canada and Mexico). Single parts are £247 (US\$449 in USA, Canada and Mexico) plus postage. EU subscribers (outside the UK) who are not registered for VAT should add VAT at their country's rate. VAT registered members should provide their VAT registration number.

Orders, which must be accompanied by payment, may be sent to any bookseller, subscription agent or direct to the publisher: Cambridge University Press, University Printing House, Shaftesbury Road, Cambridge CB2 8BS, UK; or in the USA, Canada and Mexico: Cambridge University Press, Journals Fulfillment Department, 100 Brook Hill Drive, West Nyack, New York 10994-2133.

Japanese prices for institutions (including ASP delivery) are available from Kinokuniya Company Ltd, P.O. Box 55, Chitose, Tokyo 156, Japan. Prices include delivery by air.

Periodicals postage paid in New York NY and additional mailing offices.

Postmaster: send address changes in USA, Canada and Mexico to: *The Lichenologist*, Cambridge University Press, 100 Brook Hill Drive, West Nyack, New York 10994-2133.

Claims for a missing issue should be made immediately on receipt of the subsequent issue.

NOTES FOR CONTRIBUTORS

Instructions to authors for the submission of manuscripts to *The Lichenologist* can be found at cambridge.org/lic/ifc

COPYRIGHT AND PERMISSIONS

Permission to copy (for users in the U.S.A.) is available from Copyright Clearance Center <http://www.copyright.com>, email: info@copyright.com. Organizations authorized by the UK Copyright Licensing Agency may also copy material subject to the usual conditions. For all other use, permission should be sought from Cambridge University Press. No part of this publication may otherwise be reproduced, stored or distributed by any means without permission in writing from Cambridge University Press, acting for the copyright holder.

OPEN ACCESS

The Lichenologist offers an Open Access option
For further information see cambridge.org/lic

ELECTRONIC ACCESS

This journal is included in the Cambridge Core service which can be found at journals.cambridge.org. Further information on this and other Cambridge University Press titles is available on the Cambridge University Press homepage at cambridge.org/core

Cover photograph: *Ricasolia amplissima* by David Genney.

Cambridge University Press & Assessment,
Shaftesbury Road, Cambridge, CB2 8EA, UK
One Liberty Plaza Floor 20 New York, NY 10006
477 Williamstown Road, Port Melbourne, VIC 3207, Australia
Ruiz de Alarcón 13, 28014 Madrid, Spain
Dock House, The Waterfront, Cape Town 8001, South Africa

BRITISH LICHEN SOCIETY

OFFICERS AND CONTACTS 2023

President

N. Sanderson, M.Sc., 3 Green Close, Woodlands, Southampton SO40 7HU

Vice President

F. Newbery, Ph.D., Gwelfro, Pennant, Llanon, Ceredigion SY23 5JQ

Secretary

E. H. Smith, M.Sc., F.L.S., Tutnall House, Claines Lane, Worcester WR3 7RN

Treasurer

D. Wright, B.A., 14 Barentin Way, Petersfield, Hampshire GU31 4QN

Senior Editors (Lichenologist)

C. J. Ellis, Ph.D., Royal Botanic Garden Edinburgh, 20A Inverleith Row, Edinburgh EH3 5LR

L. Myllys, Ph.D., Finnish Museum of Natural History, Botany Unit,
PO Box 7, FI-00014 University of Helsinki, Finland

Editor (Bulletin)

M. M. Putnam, B.Sc., 26 Beach Road, Hele Bay, Ilfracombe, Devon EX34 9QZ

Conservation Officer

B. W. Edwards, Dorset Environmental Record Centre, Library Headquarters, Colliton Park,
Dorchester, Dorset DT1 1XJ

Archivist

M. R. D. Seaward, D.Sc., F.L.S., School of Archaeological & Forensic Sciences,
The University of Bradford, West Yorkshire BD7 1DP

Librarian

T. E. Greenaway, M.Sc., Cilgattw, Felinewm, Carmarthen SA32 7QA

Curator

R. K. Brinklow, B.Sc., c/o Dundee Museums and Art Galleries, Albert Square,
Dundee DD1 1DA, www.herbarium@britishlichensoociety.org.uk

Field Meetings Secretary

G. Boswell, Base Lodge, 16 The Parks, Minehead TA24 8BS

Trustees

P. Cannon (Chair) J. Allinson A. Cross E. Gaya
H. Plaisier J. M. Simkin J. Skinner G. Weerakoon R. Yahr

Membership of the British Lichen Society is open to all individuals (not institutions) anywhere in the world interested in any aspect of lichenology. Subscriptions, due on joining and afterwards on 1 January each year, are: Regular membership without *The Lichenologist* £30; Regular membership with *e-Lichenologist* £40; Regular membership with print *The Lichenologist* £45; Discounted (student and senior) membership without *The Lichenologist* £15; Discounted membership with *e-Lichenologist* £25; Discounted membership with print *The Lichenologist* £30. All members receive the Society's twice-yearly Bulletin. Details of the Society, including membership, may be found on the Society's website www.britishlichensoociety.org.uk or obtained from the Membership Secretary (membership@britishlichensoociety.org.uk).

This journal issue has been printed on FSC™-certified paper and cover board. FSC is an independent, nongovernmental, not-for-profit organization established to promote the responsible management of the world's forests. Please see www.fsc.org for information.

Printed in Great Britain by Henry Ling Limited, The Dorset Press, Dorchester, DT1 1HD.