

EDINBURGH JOURNAL OF BOTANY

AN INTERNATIONAL JOURNAL OF PLANT
SYSTEMATICS AND BIODIVERSITY

Editor-in-chief
DR NEIL BELL

VOLUME 76 (2019)



CAMBRIDGE
UNIVERSITY PRESS

PUBLISHED BY THE PRESS SYNDICATE OF THE UNIVERSITY OF
CAMBRIDGE

The Pitt Building, Trumpington, Cambridge CB2 1RP, United Kingdom

CAMBRIDGE UNIVERSITY PRESS

UPH, Cambridge CB2 8BS, United Kingdom

1 Liberty Plaza, New York, NY 10006, USA

477 Williamstown Road, Port Melbourne, VIC 3207, Australia

Calle Impresores, 20, 28660 Boadilla del Monte, Madrid, Spain

Lower Ground Floor, Nautica Building, The Water Club, Beach Road, Granger
Bay, 8005 Cape Town, South Africa

© Trustees of the Royal Botanic Garden Edinburgh (2019)

Printed in the UK by Bell & Bain Ltd, Glasgow G46 7UQ

CONTENTS OF VOLUME 76 (2019)

VOL. 76, No. 1, MARCH 2019


Flora and floristic affinities of the cerrados of Maranhão State, Brazil. H. G. SILVA-MORAES, I. CORDEIRO & N. FIGUEIREDO	1
Three new combinations in <i>Eumachia</i> (Rubiaceae – Palicoureeae) from Southeast Asia. I. M. TURNER	23
A new species of <i>Aeschynanthus</i> (Gesneriaceae) from Vietnam. D. J. MIDDLETON & H. J. ATKINS	29
How many species of <i>Etilingera</i> (Zingiberaceae) are there in the Philippines? A. D. POULSEN & R. V. A. DOCOT	33
Flora of Nam Kading National Protected Area VI: <i>Didymocarpus middletonii</i> (Gesneriaceae), a new species from limestone. K. SOUVANNAKHOUUMANE, P. SOULADETH, S. TAGANE, C.-J. YANG & T. YAHARA	45
<i>Rigiolepis</i> and <i>Vaccinium</i> (Ericaceae) in Borneo. G. ARGENT	55

VOL. 76, No. 2, JULY 2019

New taxa and new combinations in the British flora. T. C. G. RICH, A. MCVEIGH & C. A. STACE	173
Three new species of <i>Barbacenia</i> (Velloziaceae) from Tocantins, Brazil. R. J. V. ALVES, A. R. GUIMARÃES, R. SADALA, M. LIRA & N. G. DA SILVA	181
Contributions to the knowledge of Cambodian Cyperaceae. K. TREMETSBERGER, S. HAMEISTER, D. A. SIMPSON & K.-G. BERNHARDT	197
Typification of Sri Lankan Gesneriaceae. S. RANASINGHE, D. J. MIDDLETON, H. J. ATKINS, R. MILNE & M. MÖLLER	221
Phylogeny of two African genera of Sapotaceae – <i>Englerophytum</i> and <i>Synsepalum</i> . D. BORG, J. E. RICHARDSON, D. J. HARRIS, L. GAUTIER, M. HUGHES & B. MACKINDER	231
<i>Hiraea costaricensis</i> and <i>H. polyantha</i> , two new species of Malpighiaceae, and circumscription of <i>H. quapara</i> and <i>H. smilacina</i> . C. ANDERSON	269
An updated checklist and a new species of <i>Begonia</i> (<i>B. rheophytica</i>) from Myanmar. M. HUGHES, M. M. AUNG & K. ARMSTRONG	285
<i>Panaeolus</i> (Agaricales) from western Paraná State, South Brazil, with a description of a new species, <i>Panaeolus sylvaticus</i> . A. G. S. SILVA-FILHO, C. SEGER & V. G. CORTEZ	297

VOL. 76, No. 3, NOVEMBER 2019

Graham Charles George Argent, 1941–2019. P. WILKIE	311
Studies in the flora of Arabia: XXXII. <i>Vachellia pennivenia</i> (Leguminosae: Mimosoideae) – a little-known tree species endemic to the island of Socotra F. L. ANDERSON & S. G. KNEES	313
Five decades of decline for old-growth indicator lichens in Scotland. C. J. ELLIS & B. J. COPPINS	319
Notes on <i>Cyrtandra</i> (Gesneriaceae) from Japan, Taiwan and Batan Island (Philippines). K. NISHII, G. KOKUBUGATA, M. MÖLLER & H. J. ATKINS	333
Studies in the flora of Arabia: XXXIII. A new species of <i>Lavandula</i> (Lamiaceae) from Oman. A. PATZELT & A. AL HINAI	345
<i>Salvia daiguii</i> (Lamiaceae): a new species from west Hunan, China. Y. K. WEI, C. A. PENDRY, D. G. ZHANG & Y. B. HUANG	359
<i>Viscum sahyadricum</i> (Viscaceae), a new species from the Western Ghats of India. M. M. SARDESAI, S. P. GAIKWAD & S. R. YADAV	369
Quantitative assessment of anisocotyly in <i>Haberlea rhodopensis</i> and <i>Ramonda myconi</i> . B.-H. HUANG, K. NISHII, C.-N. WANG & M. MÖLLER	377
<i>Lomatogonium gaurgopalii</i> , a new species of Gentianaceae from Sikkim Himalaya. M. MIDDAY, J. GHOSH & D. MAITY	393
A new species of <i>Oocephalus</i> (Lamiaceae) from Goiás, Brazil. A. S. SOARES, R. M. HARLEY, J. F. B. PASTORE & J. G. JARDIM	403
<i>Erratum</i>	
<i>Salvia daiguii</i> (Lamiaceae): a new species from west Hunan, China C. PENDRY	411
Reviewers for Volume 76	413
Index to Volume 76	415
Volume contents	



Access
leading
journals in
your subject

Cambridge Core

Explore today at [cambridge.org/core](https://www.cambridge.org/core)

Cambridge **Core**



CAMBRIDGE
UNIVERSITY PRESS



Life Sciences

Books and Journals from
Cambridge University Press

Cambridge is one of the leading publishers in ecology and conservation biology and publishes high quality texts and research across the breadth of the life sciences, focusing particularly on animal behaviour, biological anthropology, evolutionary biology, computational and systems biology, as well as statistics and professional development titles for biologists.

We also have an extensive portfolio of established journals in agriculture, ecology and conservation, and animal science.

For further details visit:
[cambridge.org/core-life-sciences](https://www.cambridge.org/core-life-sciences)

**Cambridge
Core**

 **CAMBRIDGE
UNIVERSITY PRESS**

Edinburgh Journal of Botany is an international journal of plant systematics. Contributions relating to plant systematics and allied subjects, including biodiversity, conservation science and phytogeography, will be considered. Papers reporting the results of research that link traditional and modern techniques are especially welcomed. **Manuscripts should be sent in electronic form** to ejb@rbge.org.uk. All manuscripts will be subject to multiple peer review before publication. Submitted manuscripts should not have been accepted for publication or be under consideration elsewhere. The **language** of the journal is UK English. Authors whose mother tongue is not English should have their papers checked by a fluent or proficient English speaker before submission.

There are no page charges. A PDF offprint will be supplied free of charge to the corresponding author. Paper offprints may be purchased through the publisher. Colour plates are published online and in print free of charge.

Text pages should be numbered serially, with the title and abstract on the first. Genus and species names should be italicised and should be followed by the authority when first used in the main text or in diagnoses. SI (metric) units must be used, other than in specimen citations, where appropriate. Authors are advised not to return loan material of new taxa until papers have been reviewed. Refer to volume 63 onwards to see how nomenclatural details, typification and specimens seen should be formatted.

The **title page** should include the title, the name(s) and address(es) of the author(s), the abstract, a short running title and a few important keywords. Titles do not normally include authors of scientific names. Correspondence will be addressed to the first author unless otherwise indicated. The **abstract** should be concise and informative.

Author abbreviations should precisely follow: *The International Plant Names Index*, <http://www.ipni.org/index.html>; *Index Fungorum, Authors of Fungal Names*, http://www.indexfungorum.org/authorsof_fungalnames.htm.

Herbarium abbreviations should follow: *Index Herbariorum. Part I: The Herbaria of the World*, <http://sweetgum.nybg.org/ih/>.

Journal abbreviations should follow: *BPH Online*, http://fmhibd.library.cmu.edu/fmi/iwvp/cgi?-db=BPH_Online2014&-loadframes.

Book title abbreviations should follow: *Taxonomic Literature*, <http://www.sil.si.edu/digitalcollections/tl-2/index.cfm>, except that all abbreviated words should be capitalised, e.g. Sp. Pl. not Sp. pl.

References in the text should be cited by author and publication date: (Smith, 2014) or ‘as stated by Smith (2014)’. Multiple references should be arranged chronologically. For three or more authors use *et al.* In the reference list, references should be in alphabetical order and should appear in the following style:

KNOFF, P., SCHULZ, C., LITTLE, D. P., STÜTZEL, T. & STEVENSON, D. W. (2012). Relationships within Podocarpaceae based on DNA sequence, anatomical, morphological, and biogeographical data. *Cladistics* 28(3): 271–299.

NOLTIE, H. J. (2013). *The Botanical Collections of Colonel and Mrs Walker: Ceylon, 1830–1838*. Edinburgh: Royal Botanic Garden Edinburgh.

ZHANG, Y. X. & LI, D. Z. (2013). History of and recent advances in plant taxonomy. In: HONG, D. Y. & BLACKMORE, S. (eds) *Plants of China: A Companion to the Flora of China*, pp. 256–278. Beijing: Science Press.

Tables should be numbered in arabic numerals and carry a descriptive title.

Figures should be numbered consecutively in arabic numerals and referred to in the text thus: (Fig. 1), (Figs 2, 3), (Figs 1–4). Each figure should be supplied as an individual file. The multiple elements of any composite figure should *not* be supplied as individual files. Figure legends should be provided separately at the end of the main text file. Line illustrations (botanical line drawings or diagrams comprising distinct straight or curved lines against a plain background, without grey or colour shading) should be supplied as EPS files or TIFF files (≥ 1000 dpi), and greyscale or colour halftone illustrations (photographs or diagrams with grey or colour shading) should be supplied as EPS files or TIFF files (≥ 300 dpi) (correspond with the editor if this should prove problematic). EPS is preferred; it enables resizing without loss of resolution. Please see the Cambridge Journals Artwork Guide (<https://www.cambridge.org/core/services/authors/journals/journals-artwork-guide>) for more information. Use LZW compression for TIFF files, remove excess space and elements from around the image, and crop or scale the image to the journal page size (12.5 × 19.5 cm to include caption). A measured scale mark should be included on each illustration to indicate magnification.

FirstView articles in *Edinburgh Journal of Botany*: All articles are published online on FirstView ahead of allocation to an issue. All taxonomic articles will contain the date of original online publication on FirstView, which fulfils the stipulations of the International Code of Nomenclature for algae, fungi, and plants.

Open Access: Cambridge Open Option allows authors the option to make their articles freely available to everyone, immediately on publication. For further information see the online Instructions for Contributors at cambridge.org/ejb.

© Trustees of the Royal Botanic Garden Edinburgh

This journal issue has been printed on FSC-certified paper and cover board. FSC is an independent, nongovernmental, not-for-profit organisation established to promote the responsible management of the world's

CONTENTS

Graham Charles George Argent, 1941–2019 P. WILKIE	311
Studies in the flora of Arabia: XXXII. <i>Vachellia pennivenia</i> (Leguminosae: Mimosoideae) – a little-known tree species endemic to the island of Socotra F. L. ANDERSON & S. G. KNEES	313
Five decades of decline for old-growth indicator lichens in Scotland C. J. ELLIS & B. J. COPPINS	319
Notes on <i>Cyrtandra</i> (Gesneriaceae) from Japan, Taiwan and Batan Island (Philippines) K. NISHII, G. KOKUBUGATA, M. MÖLLER & H. J. ATKINS	333
Studies in the flora of Arabia: XXXIII. A new species of <i>Lavandula</i> (Lamiaceae) from Oman A. PATZELT & A. AL HINAI	345
<i>Salvia daiguii</i> (Lamiaceae): a new species from west Hunan, China Y. K. WEI, C. A. PENDRY, D. G. ZHANG & Y. B. HUANG	359
<i>Viscum sahyadricum</i> (Viscaceae), a new species from the Western Ghats of India M. M. SARDESAI, S. P. GAIKWAD & S. R. YADAV	369
Quantitative assessment of anisocotly in <i>Haberlea rhodopensis</i> and <i>Ramonda myconi</i> B.-H. HUANG, K. NISHII, C.-N. WANG & M. MÖLLER	377
<i>Lomatogonium gaurgopalii</i> , a new species of Gentianaceae from Sikkim Himalaya M. MIDDAY, J. GHOSH & D. MAITY	393
A new species of <i>Oocephalus</i> (Lamiaceae) from Goiás, Brazil A. S. SOARES, R. M. HARLEY, J. F. B. PASTORE & J. G. JARDIM	403
<i>Erratum</i>	
<i>Salvia daiguii</i> (Lamiaceae): a new species from west Hunan, China C. PENDRY	411
Reviewers for Volume 76	413
Index to Volume 76	415
Volume contents	

The cover illustration, drawn by Mary Mendum, is of the diminutive alpine plant *Sibbaldia procumbens*, named in honour of one of the Royal Botanic Garden Edinburgh's founders, Robert Sibbald. This plant is used, in a stylised form, as the Garden's official logo.

Date of print copy publication of *Edinburgh Journal of Botany* 76(2) (pages 173–310): 25 June 2019

Cambridge Core

For further information about this journal please go to the journal website at:
cambridge.org/ejb



MIX
Paper from
responsible sources
FSC® C007785

CAMBRIDGE
UNIVERSITY PRESS