



The journal NeoBiota is a continuation of the former NEOBOTA publication series.
For volumes 1–8 see <http://www.oekosys.tu-berlin.de/menue/neobiota/>

Contents

1

Syndromes in suites of correlated traits suggest multiple mechanisms facilitating invasion in a plant range-expander

Lisa Johanna Tewes, Caroline Müller

23

The Homogocene: a research prospectus for the study of biotic homogenisation

Julian D. Olden, Lise Comte, Xingli Giam

37

Prevention of microbial species introductions to the Arctic: The efficacy of footwear disinfection measures on cruise ships

Sabine B. Rumpf, Inger Greve Alsos, Chris Ware

51

Book Review: The Green Menace – Emerald Ash Borer and the Invasive Species Problem by Jordan D. Marché II

Marcel Rejmanek

ISSN 1314-2488 (online) ISSN 1619-0033 (print)

A peer-reviewed open-access journal



NeoBiota

Advancing research on alien species and biological invasions

NeoBiota 37 ♦ 2018



Bunias orientalis L.

37 ♦ 2018

 PENSOFT®

<http://neobiota.pensoft.net>



A peer-reviewed open-access journal

NeoBiota

Advancing research on alien species and biological invasions

For those who want their work known rapidly to the World !

Editor-in-Chief

Ingolf Kühn
Helmholtz Centre for
Environmental Research
UFZ
Halle, Germany
E-mail: ingolf.kuehn@ufz.de

Managing Editor

Lyubomir Penev
Institute of Biodiversity and Ecosystem Research
Bulgarian Academy of Sciences
Yurii Gagarin Street 2
1113 Sofia, Bulgaria
E-mail: info@pensoft.net

Editorial Board: <http://neobiota.pensoft.net/board>

Focus and Scope

NeoBiota is a peer-reviewed, open-access, rapid online journal on the underlying mechanisms and associated consequences of all types of alien species and biological invasions. **NeoBiota** publishes papers across all disciplines interested in biological invasions, specifically on the ecology, evolution and biogeography of non-indigenous aquatic and terrestrial animals, plants, fungi and micro-organisms, on mechanisms that drive the introduction, establishment and spread of these species, on ecological, evolutionary, economic and other consequences of biological invasions, and on the management of invasions in any part of the world. **NeoBiota** also strongly encourages papers on ethical, social, legal and policy issues related to biological invasions.

NeoBiota will consider for publishing works on the following topics:

- Original research articles
- Reviews as longer articles, offering a comprehensive overview, historical analysis or/and future perspectives of a topic
- Monographs and collection of papers with no limit in size, published as 'special issues'
- Short communications
- Letters and Discussion papers
- Book reviews
- Data papers

ISBN numbers will be assigned to large monographic papers, monographs, collections of papers, Festschrift volumes, atlases, checklists, conspecti.

All content is Open Access distributed under the terms of the *Creative Commons Attribution License*, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited. Authors are thus encouraged to post the pdf files of published papers on their homepages or elsewhere to expedite distribution.

Editorial Office

Pensoft Publishers
Prof. Georgi Zlatarski 12, 1700 Sofia, Bulgaria
Tel. +359-2-8704281, Fax +359-2-8704282
E-mail: neobiota@pensoft.net
<http://neobiota.pensoft.net>

AUTHOR GUIDELINES

Authors are kindly requested to submit their manuscript *only* through the online submission module at <http://neobiota.pensoft.net/>. In case of difficulties with the submission procedure, please contact neobiota@pensoft.net. Full text of author guidelines is available at: <http://neobiota.pensoft.net/about#AuthorGuidelines>

EXCERPTS FROM THE GUIDELINES

BODY TEXT. All papers must be in English, checked by a native English-speaking colleague (if author(s) is/are not native English speaker(s)). Write with precision, clarity, and economy: use the active voice and first person whenever appropriate.

WEB (HTML) LINKS. Authors may include links to other Internet resources in their article. This is especially encouraged in the reference section. When inserting a reference to a web-page, please include the **http://** portion of the address.

CITATIONS WITHIN THE TEXT. Before submitting the manuscript, check each citation in the text against the **References** to ensure that they match exactly. Delete citations from the list if they are not actually cited in the text of the article. Citations in the text should be formatted as follows: (Smith 1990) or (Smith et al. 1998; Brock and Gunderson 2001; Felt 2006).

REFERENCES. It is crucial to properly format the references, because all references will be linked electronically as much as possible to the papers they cite. For all references, list all authors. You can include a **DOI** number for the full-text article as an alternative to or in addition to traditional volume and page numbers. Please use the following style for the reference list:

Published Papers: Polaszek A, Alonso-Zarazaga M, Bouchet P, Brothers DJ, Evenhuis NL, Krell FT, Lyal CHC, Minelli A, Pyle RL, Robinson N, Thompson FC, van Tol J (2005) ZooBank: the open-access register for zoological taxonomy: Technical Discussion Paper. *Bulletin of Zoologi-*

cal Nomenclature 62: 210-220.

Accepted Papers: Same as above, but "In press" appears instead the page numbers.

Electronic Journal Articles: Mallet J, Willmott K (2002) Taxonomy: renaissance or Tower of Babel? *Trends in Ecology and Evolution* 18 (2): 57-59. doi: 10.1016/S0169-5347(02)00061-7.

Paper within conference proceedings: Orr AG (2006) Odonata in Bornean tropical rain forest formations: Diversity, endemicity and applications for conservation management. In Cordero Rivera A (Ed) *Forest and Dragonflies. Fourth WDA International Symposium of Odonatology, Pontevedra (Spain), July 2005*. Pensoft Publishers, Sofia-Moscow, 51-78.

Book chapters: Mayr E (2000) The biological species concept. In: Wheeler QD, Meier R (Eds) *Species Concepts and Phylogenetic Theory: A Debate*. Columbia University Press, New York, 17-29.

Books: Goix N, Klimaszewski J (2007) *Catalogue of Aleocharine Rove Beetles of Canada and Alaska*. Pensoft Publishers, Sofia-Moscow, 166 pp.

Book with institutional author: International Commission on Zoological Nomenclature (1999) *International code of zoological nomenclature. Fourth Edition*. London: The International Trust for Zoological Nomenclature.

PhD thesis: Dalebout ML (2002) Species identity, genetic diversity and molecular systematic relationships among the Ziphiidae (beaked whales). PhD thesis, Auckland, New Zealand: University of Auckland.

Link/URL: BBC News: Island leopard deemed new species. <http://news.bbc.co.uk/> [accessed 3.VI.2008]

CITATIONS OF PUBLIC RESOURCE DATABASES: It is highly recommended all appropriate datasets, images, and information to be deposited in public resources. Please provide the relevant accession numbers (and version numbers, if appropriate). Accession numbers should be provided in parentheses after the entity on first

use. Examples of such databases include, but are not limited to:

- Zoobank (www.zoobank.org),
- Morphbank (www.morphbank.net),
- Genbank (www.ncbi.nlm.nih.gov/Genbank),
- BarCode (www.barcodinglife.org)

Providing accession numbers allows linking to and from established databases and integrates your article with a broader collection of scientific information. Please list all accession numbers directly **after the References**.

DATA PUBLISHING. The journal offers various models of data publishing in a cooperation with the GBIF (www.gbif.org), Dryad (www.datadryad.org), Pangaea (www.pangaea.de) and other data repositories.

OPEN ACCESS FEES. Publication fees in open access journals ensure a barrier-free distribution of your paper at no charge for the readers and include costs involved in processing, formatting, publishing, indexing and archiving your paper.

The journal charges Open Access Publication Fee of EURO 20 per page for papers of less than 100 printed pages. Publication fees for larger papers will be discounted and can be negotiated with the Managing Editor.

Open Access Publication Fees are usually covered by institutional funds and grants. Discounts/waivers can be requested by private and retired zoologists, scientists from low- and middle-level income countries, post-graduate students, especially in case of exceptionally good manuscripts.

Discounts will be offered also to scientists who actively participate in the reviewing and editing process.

Note: *Open access fees will be waived for all submissions published in the first four issues of NeoBiota and will be reduced with 25 % until the journal will be covered by the ISI Web of Science. All papers published in the first issues will be later ISI covered and will have an Impact factor when the journal receives it.*

PRINTED VERSION. Offprints and printed issues of the journal can be purchased additionally (see journal's website). For standing orders/subscriptions please contact the Managing Editor.