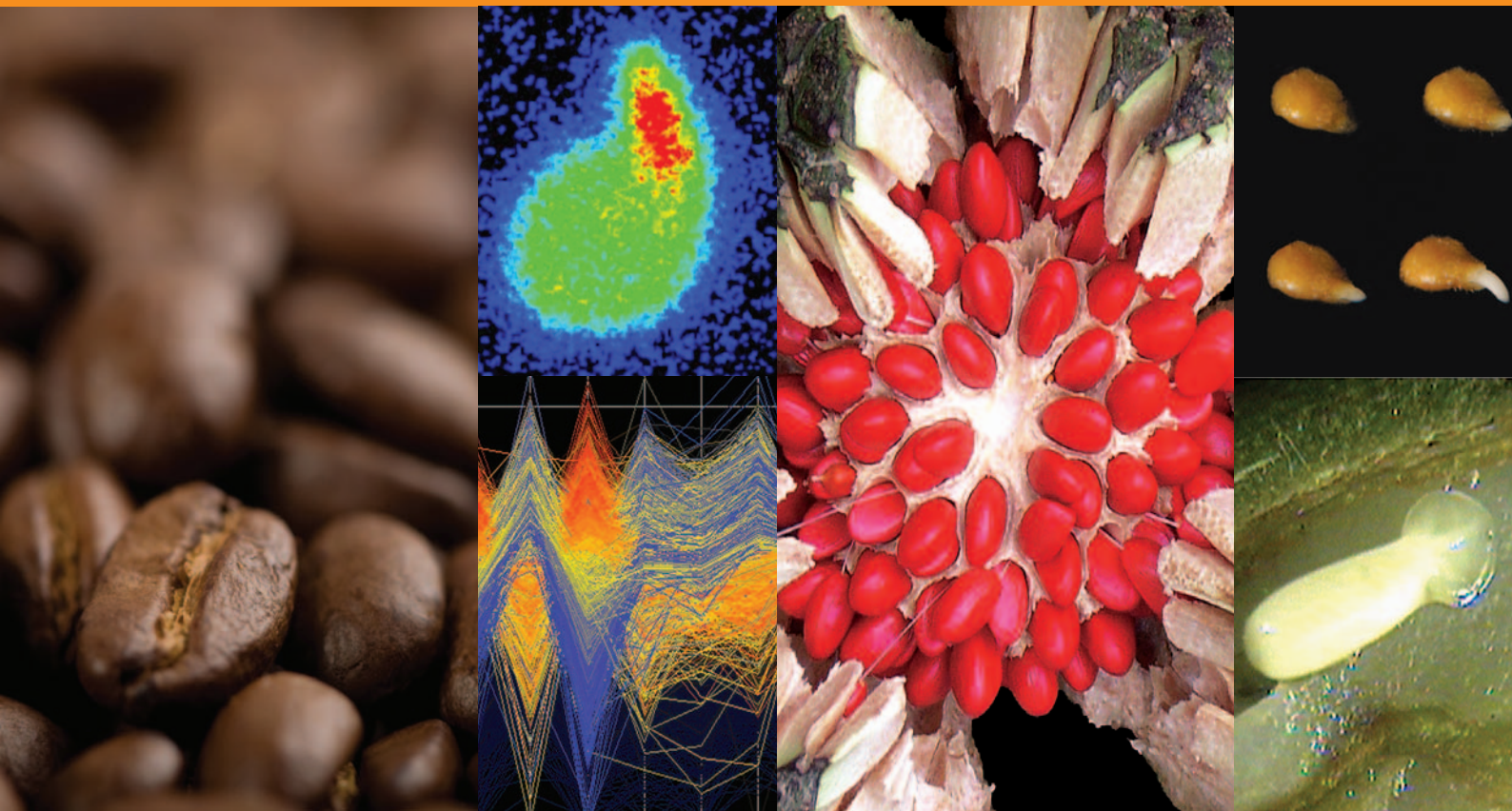


SEED SCIENCE RESEARCH

journals.cambridge.org/ssr



Seed Science Research is the official Journal of the International Society for Seed Science

The contents of this journal are available to subscribers online at
journals.cambridge.org/SSR

Aims and Scope

Seed Science Research provides an international vehicle for the publication of original papers and review articles on the fundamental aspects of seed research. The emphasis is on the physiology, biochemistry, molecular biology and ecology of seeds, covering the following key topics:

- germination
- dormancy
- ecophysiology
- reserve mobilization
- viability
- longevity
- vigour
- establishment
- seed and embryo development
- maturation
- seed–soil and seed–animal interactions
- computer modelling
- chemical and structural defences
- biotechnology
- physiology of seed pathology

Editor

H.W.M. Hilhorst

*Lab of Plant Physiology, Wageningen University, Arboretumlaan 4,
6703 BD Wageningen, The Netherlands*

Review Editor

J.D. Bewley

Department of Molecular & Cellular Biology, University of Guelph, Guelph, Ontario N1G 2W1, Canada

Associate Editors

Professor Julia Buitink, *INRA, France*

W. Finch-Savage, *Warwick HRI (Wellesbourne), UK*

H.W.M. Hilhorst, *Wageningen University, The Netherlands*

Professor Hiro Nonogaki, *Oregon State University, USA*

K. Thompson, *University of Sheffield, UK*

Editorial Board

P. Allen, *Brigham Young University, Provo, USA*

C.C. Baskin, *University of Kentucky, Lexington, USA*

R. Benech-Arnold, *University of Buenos Aires,
Argentina*

P. Berjak, *University of KwaZulu-Natal, South Africa*

M. Black, *King's College London, UK*

K.J. Bradford, *University of California, Davis, USA*

M.A. Cohn, *Louisiana State University, USA*

F. Corbineau, *Université Pierre et Marie Curie,
Paris, France*

J.M. Farrant, *University of Cape Town, South Africa*

M. Fenner, *University of Southampton, UK*

D. Job, *CNRS, Bayer CropScience, Lyon, France*

O. Leprince, *Institut National d'Horticulture,
Angers, France*

G. Leubner-Metzger, *Albert-Ludwigs-University,
Freiburg, Germany*

P. Milberg, *Linköping University, Sweden*

E. Nambara, *University of Toronto, Canada*

H. Nonogaki, *Oregon State University, Corvallis, USA*

H. Pritchard, *Royal Botanic Gardens, West Sussex, UK*

A. Richter, *University of Vienna, Austria*

C.A. Thanos, *University of Athens, Greece*

P. Toorop, *Royal Botanic Gardens, West Sussex, UK*

C.W. Walters, *National Seed Science Laboratory,
Fort Collins, USA*

© Cambridge University Press 2009

Published by Cambridge University Press
Cambridge CB2 8RU: New York, NY 10013-2473

Seed Science Research

Musgrave, M.E., Kuang, A., Allen, J., Blasiak, J. & van Loon, J.J.W.A. <i>Brassica rapa</i> L. seed development in hypergravity.....	63
Hu, X.W., Wang, Y.R., Wu, Y.P. & Baskin, C.C. Role of the lens in controlling water uptake in seeds of two <i>Fabaceae</i> (<i>Papilionoideae</i>) species treated with sulphuric acid and hot water	73
Mollard, F.P.O. & Insausti, P. Soil moisture conditions affect the sensitivity of <i>Bromus catharticus</i> dormant seeds to light and the emergence pattern of seedlings.....	81
Nezamdoost, T., Tamaskani, F., Abdolzadeh, A. & Sadeghipour, H.R. Lipid mobilization, gluconeogenesis and ageing-related processes in dormant walnut kernels during moist chilling and warm incubation.....	91
Plue, J., Dupouey, J.-L., Verheyen, K. & Hermy, M. Forest seed banks along an intensity gradient of ancient agriculture.....	103
Vandelook, F., Bolle, N. & Van Assche, J.A. Morphological and physiological dormancy in seeds of <i>Aegopodium podagraria</i> (<i>Apiaceae</i>) broken successively during cold stratification.....	115

Seed Science Research is covered in the *Science Citation Index*[®],
Current Contents[®]/*Agriculture, Biology & Environmental Sciences*, *SciSearch*[®],
Research Alert[®], *BIOSIS*[®] Database,
CAB ABSTRACTS, and Elsevier BIOBASE/*Current Awareness in Biological Sciences*

Subscribing organizations are encouraged to copy and distribute this table of contents
for non-commercial purposes.

Seed Science Research

journals.cambridge.org/ssr

ISSN: 0960-2585

Publishing, Production, Marketing, and Subscription Sales Office:

Cambridge University Press
The Edinburgh Building
Shaftesbury Road
Cambridge CB2 8RU
UK
journals@cambridge.org

For Customers in North America:

Cambridge University Press
Journals Fulfillment Dept
100 Brook Hill Drive
West Nyack
New York 10994-2133
USA
journals_subscriptions@cup.org

Seed Science Research is an international journal published quarterly by Cambridge University Press in March, June, September and December.

Special sales and supplements:

This journal accepts relevant advertising and inserts. We also provide bulk reprints of suitable papers to meet teaching or promotional requirements. The journal also publishes abstracts and proceedings on behalf of academic and corporate sponsors. Please contact special_sales@cambridge.org

Subscription information:

The subscription rates for Volume 19, 2009 (4 issues) are:

Organisational, Online & Print: £457/\$909

Organisational, Online only: £364/\$724

Individual, Online & Print: £266/\$529

Individual, Online only: £105/\$210

Individual, Print only: £252/\$501

ISSS members can benefit from discounted subscriptions.

The Journal can be accessed online at <http://journals.cambridge.org/ssr>

Any **supplements** to this journal published in the course of the annual volume are normally supplied to subscribers at no extra charge.

Back volumes are available. Please contact Cambridge University Press.

Claims for non-receipt of journal issues will be considered on their merit and only if the claim is received within six months of publication. Replacement copies supplied after this date will be chargeable.

US POSTMASTERS: please send address corrections to CUP Cambridge.

Notes for Authors: may be found at <http://journals.cambridge.org/ssr>. Please note there are no page charges or handling fees to publish in SSR.

Offprints: The author (or main author) of an accepted paper will receive a free PDF file via email.

Copyright: CUP, 2009. All rights reserved: permission for reproduction of any part of the journal (text, figures, tables or other matter) in any form (on paper, microfiche or electronically) should be sought directly from the Publisher, or a licence permitting restricted copying obtained from the Copyright Licensing Agency, Tottenham Court Road, London W1P 9HE, UK, or in the USA by the Central Clearance Center, 27 Congress Street, Salem MA 01970.

Disclaimer: The information contained herein, including any expression of opinion and any projection or forecast, has been obtained from or is based upon sources believed by us to be reliable, but is not guaranteed as to accuracy or completeness. The information is supplied without obligation and on the understanding that any person who acts upon it or otherwise changes his/her position in reliance thereon does so entirely at his/her own risk.

Cambridge University Press does not accept responsibility for any trade advertisement included in this publication.

This journal is printed on acid-free paper from renewable sources
Printed by Latimer Trend, Devon, UK.