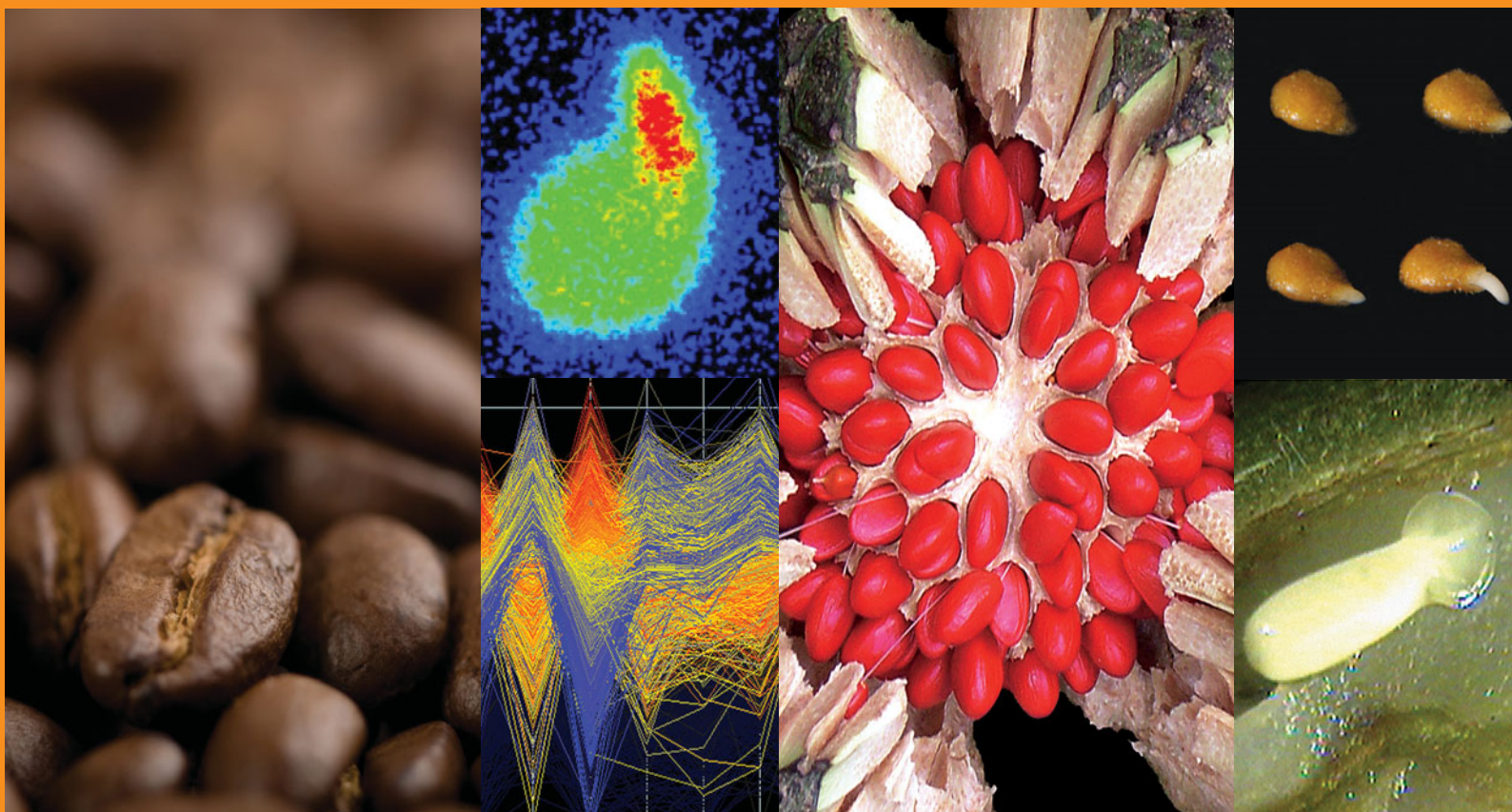


SEED SCIENCE RESEARCH

journals.cambridge.org/ssr



*international society
for seed science*

**CAMBRIDGE
UNIVERSITY PRESS**

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 is an international journal that publishes original papers, as well as reviews and opinion papers, dealing primarily with the fundamentals of seed research with emphasis on the physiology, biochemistry, molecular biology and ecology of seed development, dormancy and germination. The importance of seeds to propagation, food, biofuel and biodiversity is of increasing interest and therefore submissions on seed genetics, seed biotechnology, seed treatment and seedling establishment are especially encouraged if they are novel and 'seed driven'.

Editor

Henk W.M. Hilhorst

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

Review Editor

J. Derek Bewley

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

Associate Editors

Julia Buitink, *INRA, France*

Bill Finch-Savage, *Warwick University, UK*

Hiro Nonogaki, *Oregon State University, USA*

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

Ken 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*

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

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

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

E. Nambara, *University of Toronto, Canada*

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

B. Peco, *Universidad Autonoma de Madrid, Spain*

S. Penfield, *University of York, UK*

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

K. Steadman, *University of Queensland, Brisbane,
Australia*

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

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

© Cambridge University Press 2012

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

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

Seed Science Research

Review Articles

- Western, T.L.** The sticky tale of seed coat mucilages: production, genetics, and role in seed germination and dispersal..... 1
- Goggin, D.E. & Steadman, K.J.** Blue and green are frequently seen: responses of seeds to short- and mid-wavelength light..... 27

Research Papers

- Silveira, F.A.O, Ribeiro, R.C., Oliveira, D.M.T., Fernandes, G.W. & Lemos-Filho, J.P.** Evolution of physiological dormancy multiple times in Melastomataceae from Neotropical montane vegetation 37
- Cheib, A.L. & Garcia, Q.S.** Longevity and germination ecology of seeds of endemic Cactaceae species from high-altitude sites in south-eastern Brazil 45
- Kodde, J., Buckley, W.T., de Groot, C.C., Retiere, M., Zamora, A.M.V. & Groot, S.P.C.** A fast ethanol assay to detect seed deterioration..... 55

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 22, 2012 (4 issues) are:

Organisational, Online & Print: £543/\$1035

Organisational, Online only: £420/\$800

Individual, Online & Print: £318/\$605

Individual, Online only: £120/\$232

Individual, Print only: £300/\$570

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, 2012. 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.