An international journal devoted to basic research into the origins, development, and function of plants from the molecular to the whole organism and their interactions within the biotic and abiotic environment.

Editor-in-Chief
Michael R. Blatt
Glasgow, UK

Associate Editors
Julian Hibberd Cambridge, UK
Gerhard Thiel Darmstadt, Germany
Alice Cheung Amherst, MA, USA
Hong Ma Shanghai, China
Jiming Jiang Madison, WI, USA
Graham Farquhar Canberra, Australia
Anna Amtmann Glasgow, UK
Teun Munnik Amsterdam, The Netherlands
Yair Machar-Hill East Lansing, MI, USA
Dr. Julia Bailey-Serres Riverside, CA, USA

International Board of Monitoring Editors
Lisa Ainsworth Urbana-Champaign, IL, USA
Antony Bacic Parkville, VIC, Australia
Diane C. Bassham Ithaca, NY, USA
Carl Bernacchi Urbana, IL, USA
Joe Chappell Lexington, KY, USA
François Chaumont Louvain, Belgium
Tyzy-Jen Chiou Taipei, Taiwan
John Christie Glasgow, UK
Vitaly Clkovsky Stony Brook, NY, USA
Hervé Cochard Clermont-Ferrand, France
Alison DeLong Providence, RI, USA
Karol Josef Dietz Bielefeld, Germany
José Dinneny Stanford, CA, USA
Jeffrey J. Doyle Ithaca, NY, USA
Robert Edwards Durham, UK
John R. Evans Canberra, ACT, Australia
Peter Geigenberger Munich, Germany
Anja Geitmann Montréal, Canada
Thomas Girke Riverside, CA, USA
Zhizhong Gong Beijing, China
Kim Hammond-Kosack Rothamsted, UK
Matthew Hannah Brussels, Belgium
Stacey Harmer Davis, CA, USA
Gregg A. Howe East Lansing, MI, USA
Ning Jiang East Lansing, MI, USA
Elizabeth Kellogg St. Louis, MO, USA
Anthony Kinney Wilmington, DE, USA
Leon Kochan Ithaca, NY, USA
Joachim Kopka Golm, Germany
Cris Kuhlemeier Bern, Switzerland
Frans Maathuis York, UK
Tony Miller Norwich, UK
Ron Mittler Denton, TX, USA
Ferenc Nagy Szeged, Hungary
Jennifer Nemhauser Seattle, WA, USA
Graham Noctor Paris, France
Ralph Panstruga Aachen, Germany
Ronald Pierik Utrecht, The Netherlands
Anreddy S.N. Reddy Fort Collins, CO, USA
Sue Rhee Stanford, CA, USA
Silke Robatzek Norwich, UK
Joel K. C. Rose Ithaca, NY, USA
Alexander Ruban London, UK
Wataru Sakamoto Okayama, Japan
Eric Schaller Hanover, NH, USA
Ron R. Sederoff Raleigh, NC, USA
Motoaki Seki Yokohama, Japan
Shin-Han Shiu East Lansing, MI, USA

Research Area and Sections
Biochemistry and Metabolism
Breakthrough Technologies
Cell Biology
Genes, Development, and Evolution
Ecophysiology and Sustainability
Membranes, Transport, and Biophysics
Signaling and Response
Systems and Synthetic Biology

Copyright 2013 American Society of Plant Biologists. All rights reserved. Printed on acid-free paper. Printed in the USA.