Letters

The Cohesion-Tension Theory

In the June 2004 (162: 3) issue of *New Phytologist*, U. Zimmermann *et al.* published a Tansley review that criticizes the work of many scientists involved in the study of long-distance water transport in plants (Zimmermann *et al.*, 2004). Specifically, the review attempts to 'show that the arguments of the proponents of the Cohesion Theory are completely misleading'. We, the undersigned, believe that this review is misleading in its discussion of the many recent papers which demonstrate that the fundamentals of the Cohesion-Tension theory remain valid (Holbrook *et al.*, 1995; Pockman *et al.*, 1995; Steudle, 1995; Milburn, 1996; Sperry *et al.*, 1996; Tyree, 1997; Melcher *et al.*, 1998; Comstock, 1999; Stiller & Sperry, 1999; Tyree, 1999; Wei *et al.*, 1999a; Wei *et al.*, 1999b; Cochard *et al.*, 2000; Cochard *et al.*, 2001a; Cochard *et al.*, 2001b; Richter, 2001; Steudle, 2001; Cochard, 2002; Tyree & Zimmermann, 2002; Tyree, 2003; Tyree & Cochard, 2003; Tyree *et al.*, 2003). We wish the readers of *New Phytologist* to know that the Cohesion-Tension theory is widely supported as the only theory consistent with the preponderance of data on water transport in plants.

Guillermo Angeles, Instituto de Ecología, A.C., Mexico
Barbara Bond, Oregon State University, USA
John S. Boyer, University of Delaware, USA
Tim Brodribb, Harvard University, USA
J. Renée Brooks*, U.S. EPA, Oregon, USA
Michael J. Burns, formerly Harvard University, USA
Jeannine Cavender-Bares, University of Minnesota, USA
Mike Clearwater, HortResearch, New Zealand
Hervé Cochard, INRA, Clermont-Ferrand, France
Jonathan Comstock, Cornell University, USA
Stephen D. Davis, Pepperdine University, USA
Jean-Christophe Domec, Oregon State University, USA
Lisa Donovan, University of Georgia, USA
Frank Ewers, Michigan State University, USA
Barbara Gartner, Oregon State University, USA
Uwe Hacke, University of Utah, USA
Tom Hinckley, University of Washington, USA
N. Michelle Holbrook, Harvard University, USA
Hamlyn G. Jones, University of Dundee, UK
Kathleen Kavanagh, University of Idaho, USA
Bev Law, Oregon State University, USA
Jorge López-Portillo, Instituto de Ecología, A.C., Mexico
Claudio Lovisolo, University of Turin, Italy
Tim Martin, University of Florida, USA
Jordi Martínez-Vilalta, University of Edinburgh, UK
Stefan Mayr, University Innsbruck, Austria
Fredrick C. Meinzer, U.S. Forest Service, Oregon, USA
Peter Melcher, Ithaca College, USA
Maurizio Mencuccini, University of Edinburgh, UK
Stephen Mulkey, University of Florida, USA
Andrea Nardini, University of Trieste, Italy
Howard S. Neufeld, Appalachian State University, USA
John Passioura, CSIRO Plant Industry, Australia
William T. Pockman, University of New Mexico, USA
R. Brandon Pratt, Pepperdine University, USA
Serge Rambal, CNRS, Montpellier, France
Hanno Richter, Institute of Botany, Austria
Lawren Sack, University of Hawaii, USA
Sebastiano Salleo, University of Trieste, Italy
Andrea Schubert, University of Turin, Italy
Paul Schulte, University of Nevada, USA
Jed P. Sparks, Cornell University, USA
John Sperry, University of Utah, USA
Robert Teskey, University of Georgia, USA
Melvin Tyree, U.S. Forest Service, Vermont, US

(*Author for correspondence:
tel +1 541 7544684; fax +1 541 7544799;
email Brooks.ReneeJ@epa.gov)

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