

# CURRICULUM VITAE

## 1. David Serge Chatelet

Postdoctoral researcher  
Department of Ecology & Evolutionary Biology  
Brown University  
Box G-W  
Providence, RI 02912  
Phone: 401-863-6275  
E-mail: david\_chatelet@brown.edu

Citizenship: French

## 2. Education

- 2000-2004     PhD in Plant Sciences, Oklahoma State University. Dissertation Title:  
*The hydraulic properties of Loblolly pine (Pinus taeda) root seedlings*
- 1999           M.S. in Forest Biology, . Henri-Poincaré University – Nancy1 (Nancy,  
France). Dissertation title: *Seasonal variation of hydraulic resistance of  
the shoot and roots of oak (Q. robur) and beech (F. sylvatica) seedlings.*
- 1993-1998     B.S. in Biology of Populations and Ecosystems. Sciences & Techniques  
University, Besançon (France)

## 3. Professional appointments

- 2010 to present     Post-doctoral research associate, Department of Ecology and  
Evolutionary Biology, Brown University. Laboratory of Dr. Erika J.  
Edwards
- 2007 to 2010       Post-doctoral research associate, Department of Ecology and  
Evolutionary Biology, University of Tennessee, Knoxville.  
Laboratory of Dr. Taylor S. Field
- 2005 to 2007       Post-doctoral research associate, Section of Plant Biology, University  
of California at Davis. Laboratory of Dr. Thomas Rost and Mark M.  
Matthews

## 4. Publications

Taylor S. Feild, Patrick J. Hudson, Lawong Balun, **David S. Chatelet**, Angela A.  
Patino, Chait A. Sharma, Kurt McLaren. The ecophysiology of xylem hydraulic  
constraints by “basal” vessels in *Canella winterana* (Canellaceae). *International Journal  
of Plant Sciences*.

Taylor S. Field, **Davis S Chatelet**, Lawong Balun, Edward Schilling, Robert Evans.  
The evolution of angiosperm lianescence without vessels – climbing mode and wood  
structure-function in *Tasmannia cordata* (Winteraceae). *New Phytologist*.

**Chatelet DS**, CM Wistrom, AH Purcell, TL Rost, MA Matthews. 2011. Xylem  
structure of four grape varieties and twelve alternative hosts to the xylem-limited  
bacterium *Xylella fastidiosa*. *Annals of Botany*, 108(1): 73-85.

Field TS, TJ Brodribb, A Iglesias, **DS Chatelet**, A Baresch, GR Upchurch, B Gomez, BAR Mohr, C Coiffard, J Kvaček, and C Jaramillo. 2011. Fossil evidence for Cretaceous escalation in angiosperm leaf vein evolution. *Proceedings of the National Academy of Sciences USA*, 108(20): 8363-8366.

Field TS, GR Upchurch, **DS Chatelet**, TJ Brodribb, KC Grubbs, M-S Samain, and S Wanke. 2011. Fossil evidence for low gas exchange capacities for Early Cretaceous angiosperm leaves. *Paleobiology*, 37(2): 195-213.

Field TS, **DS Chatelet**, and TJ Brodribb. 2009. Ancestral xerophobia: a hypothesis on the whole plant ecophysiology of early angiosperms. *Geobiology* 7: 237 - 264.

Field TS, **DS Chatelet**, and TJ Brodribb. 2009. Giant flowers of Southern Magnolia (*Magnolia grandiflora*) are hydrated by the xylem. *Plant Physiology* 150: 1587-1597.

**Chatelet DS**, TL Rost, KA Shackel, and MA Matthews. 2008. The peripheral xylem of grapevine (*Vitis vinifera*). 1. Structural integrity in postveraison berries. *Journal of Experimental Botany*, 59(8): 1987-1996.

**Chatelet DS**, TL Rost, MA Matthews, and KA Shackel. 2008. The peripheral xylem of grapevine (*Vitis vinifera*). 2. Anatomy and development. *Journal of Experimental Botany*, 59(8): 1997-2007.

**Chatelet DS**, MA Matthews, and TL Rost. 2006. Xylem structure and connectivity in grapevine (*Vitis vinifera*) shoots provides a passive mechanism for the spread of bacteria in grape plants. *Annals of Botany*, 98: 483-494.

Bogeat-Triboulot MB, R Martin, **D Chatelet**, and H Cochard. 2002. Hydraulic conductance of root and shoot measured with the transient and dynamic modes of the high-pressure flowmeter. *Annals of Forest Science*, 59: 389-396.

*Submitted / In preparation*

Craig R. Brodersen, Brendan Choat, **David S. Chatelet**, Kenneth A. Shackel, Mark A. Matthews, Andrew J. McElrone. Peripheral xylem chains contribute to radial and tangential xylem connectivity in grapevine stems (*Vitis vinifera* and *V. arizonica*). In preparation for *American Journal of Botany*.

Edwards EJ, K Schmandt\*\*, S Schmerler\*, A Williard\*, **DS Chatelet**, W Clement, L Sack, MJ Donoghue. Disruption of the 'leaf economics spectrum': leaf lifespan is dictated by branching architecture in *Viburnum*. In preparation for *Functional Ecology*

**Chatelet DS**, EJ Edwards, Kaya Schmandt\*\*, Michael Donoghue, and Lawren Sack. Diversification of water relations and pressure volume curve parameters in Northern Hemisphere forest *Viburnums*. In preparation for *Oecologia*

\*Brown University undergraduate or \*\* Brown University alumnus

## 5. Conferences

- 2006 **Chatelet D**, MA Matthews, TL Rost. Comparison of the xylem structure of plants with different susceptibility to the spread of *Xylella fastidiosa*. Poster presented at the 2006 Pierce's disease Symposium, San Diego
- 2006 **Chatelet D**, E. Thorne, MA Matthews, TL Rost. Primary xylem: a pathway for passive bacterial movement? Poster presented at the APS-CPS-MSA joint meeting, Quebec City, Canada
- 2005 **Chatelet D**, MA Matthews, TL Rost. Xylem structure and connectivity in grapevine shoots provides a passive mechanism for the spread of bacteria in grape plants infected with Pierce's disease. Poster presented at the 2005 Pierce's Disease Research Symposium, San Diego, USA
- 2005 **Chatelet D**, K Shackel, MA Matthews. Structural integrity of Xylem in the Postveraison Grape Berry. Oral presentation at the 56<sup>th</sup> American Society for Enology and Viticulture annual meeting, Seattle, USA
- 2002 **Chatelet D**, SW Hallgren. Hydraulic conductivity and anatomy of loblolly pine roots. Poster presented at the Oklahoma State University Graduate College Research Symposium, Stillwater, USA
- 2001 Hallgren SW, P Thondikkattil, **D Chatelet**, DM Ferris, DE Enstone, CA Peterson. Root hydraulic properties and anatomy in pine: developmental changes. Poster presented at the Premières Rencontres d'Ecophysiologie de l'Arbre: Ecole Thématique. Jan. 16-19. Autrans, France.
- 1999 **Chatelet D**, MB Bogeat-Triboulot. Seasonal variation of hydraulic resistance of the shoot and roots of oak (*Q. robur*) and beech (*F. sylvatica*) seedlings. Poster presented at the 2<sup>nd</sup> International Symposium on the Dynamics of Physiological Processes in Woody Roots. Nancy, France

*Updated November 2011.*