

MAXIMILIAN LARTER

I am a plant ecophysiologicalist and an evolutionary biologist, mainly interested in how plants water transport functions and evolves within changing environments.



RESEARCH EXPERIENCE



Post-doctoral Fellow

Naturalis Biodiversity Center Leiden, The Netherlands present - 2019 - Herb hydraulics, positive root pressure and drought resistance in Brassicaceae - *Supervisor* Frederic Lens ### Post-doctoral Fellow [Smith lab](#) University of Colorado Boulder, Colorado 2019 - 2017 - Evolution of the anthocyanin pathway in Iochrominae - *Supervisor* Stacey Smith [link to Smith lab homepage] ### PhD student University of Bordeaux Bordeaux, France 2016 - 2012 - Evolution of cavitation resistance in conifers - *Supervisors* Sylvain Delzon and Jean-Christophe Domec ### Research assistant - *6 months* University of Bordeaux Bordeaux, France 2012 - Evolutionary patterns of cavitation resistance in conifers - *Supervisor* Sylvain Delzon ### Masters thesis - *6 months* University of Bordeaux Bordeaux, France 2011 - Convergent evolution of drought tolerance in conifers - *Supervisor* Sylvain Delzon ### Masters thesis - *2 months* Imperial College London Silwood Park, Ascot, UK 2010 - Population genetics of the olive (*Olea europaea*) complex - *Supervisor* Guillaume Besnard



EDUCATION

PhD in evolutionary, functional and community ecology

University of Bordeaux Bordeaux, France 2016 - 2012 - Evolution of cavitation resistance in conifers - *Supervisors* Sylvain Delzon and Jean-Christophe Domec ### Masters degree, "Bordeaux, France", 2010, 2011, Terrestrial Ecosystem Functioning and Modelling, NA, education, NA University of Orléans, Bachelors degree University of Bordeaux Orléans, France 2008 - 2005 - Organismal Biology



GRANTS & FUNDING

Alberta Mennega Stichting fieldwork grant

1,250€ Leiden (The Netherlands) 2020

External mobility grant from the COTE Cluster of Excellence

3,000€ Bordeaux (France) 2014

Research Exchange Program (Inbound)

AU\$3350 Western Sydney University, NSW (Australia)



TEACHING EXPERIENCE

Lecture (30 min) - Functional traits case study

MSc course Methods in Biodiversity Analysis Leiden University 2020

CONTACT

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<i class="birthday-cake"> August
5th, 1987, Derby (UK)

Last updated on 2021-01-18.

Practical – plant physiology “lab day”

MSc course Plant Physiology Université de Bordeaux 2012



PUBLICATIONS

Intervessel pit membrane thickness best explains variation in embolism resistance amongst stems of *Arabidopsis thaliana* accessions, *Annals of Botany*

A Thonglim, S Delzon, M Larter, O Karami, A Rahimi, R Offringa *et al.* N/A 2020

Multiple origins of insular woodiness on the Canary Islands are consistent with palaeoclimatic aridification, *bioRxiv*

AH van Huysduynen, S Janssens, V Merckx, R Vos, L Valente, A Zizka, M Larter *et al.* N/A

Developmental control of convergent floral pigmentation across evolutionary timescales, *Developmental Dynamics*

M Larter, A Dunbar-Wallis, AE Berardi, SD Smith N/A 2019

Repeated evolution of a morphological novelty: a phylogenetic analysis of the inflated fruiting calyx in the Physalideae tribe (Solanaceae), *American Journal of Botany*

R Deanna, M Larter, GE Barboza, SD Smith N/A

Convergent evolution at the pathway level: predictable regulatory changes during flower color transitions, *Molecular Biology and Evolution*

M Larter, A Dunbar-Wallis, AE Berardi, SD Smith N/A 2018

Aridity drove the evolution of extreme embolism resistance and the radiation of conifer genus *Callitris*, *New Phytologist*

M Larter, S Pfautsch, JC Domec, S Trueba, N Nagalingum, S Delzon N/A 2017

Mexican conifers differ in their capacity to face climate change, *Journal of Plant Hydraulics*

C Sáenz-Romero, M Larter, N González-Muñoz, C Wehenkel *et al.* N/A

Host range expansion is density dependent, *Oecologia*

B Castagneyrol, H Jactel, EG Brockerhoff, N Perrette, M Larter, S Delzon *et al.* N/A 2016

The evolution of cavitation resistance in conifers PhD thesis

M Larter Université de Bordeaux

Extreme aridity pushes trees to their physical limits, *Plant Physiology*

M Larter, TJ Brodribb, S Pfautsch, R Burlett, H Cochard, S Delzon N/A 2015

A broad survey of hydraulic and mechanical safety in the xylem of conifers, *Journal of Experimental Botany*

PS Bouche, M Larter, JC Domec, R Burlett, P Gasson, S Jansen, S Delzon N/A 2014



CONFERENCES & PRESENTATIONS

Poster - « Genetic basis of convergent evolution of the anthocyanin pathway and floral pigmentation in Iochrominae »

Society for Integrative and Comparative Biology Tampa, Florida 2019

Talk - « Linking changes in gene expression to the macroevolution of flower color in Iochrominae (Solanaceae) »

Evolution Meeting Portland, Oregon 2017

Talk - « Evolution of drought tolerance in conifers - *Callitris* in Australia »

LabEx Day (LabEx COTE) Bordeaux (France) 2015

Talk - « The evolution of cavitation resistance in conifers and the case of world-record *Callitris* »

Xylem International Meeting N/A

Talk - « The evolution of cavitation resistance in Conifers »

HIE Seminar Series - UWS Richmond, NSW (Australia) 2014

Poster - « Global variation and evolution of drought tolerance in Conifers »

Journées de la Société Française de Systématique Paris (France) 2012