



## 12<sup>th</sup> Annual Harvard Plant

### Biology Initiative Symposium

2017 Poster Session -- Tuesday, May 9<sup>th</sup>

#### [Seasonal Dynamics of Whole-Tree Nonstructural Carbohydrate budgets in Five Temperate Species](#)

**Authors:** Morgan Furze, Brett Huggett, Molly Wieringa, Elizabeth Rao, Claire Stolz, Mariah Carbone, Andrew Richardson  
**Lead contact email:** Morgan Furze ([morganfurze@gmail.com](mailto:morganfurze@gmail.com))

#### [Ecological Correlates of the Evolution of Pitcher Traits in the Genus \*Nepenthes\*](#)

**Authors:** Kadeem J. Gilbert, Joel H. Nitta, Gerard Talavera, Naomi E. Pierce  
**Lead contact email:** Kadeem Gilbert ([kgilbert@g.harvard.edu](mailto:kgilbert@g.harvard.edu))

#### [The Future of Wine Under Climate Change, Shifting Varieties Rather Than Growing Regions](#)

**Authors:** Ignacio Morales-Castilla, I. Garcia de Cotrazar-Atauri, B. Cook, K. van Leew, T. Lacombe, A. Parker, K. Nicholas, Elizabeth Wolkovich  
**Lead contact email:** Ignacio Morales-Castilla ([moralescastilla@fas.harvard.edu](mailto:moralescastilla@fas.harvard.edu))

#### [Mechanisms of Divergent Responses of Red and White Spruce to Parasitic Dwarf Mistletoe Infection](#)

**Authors:** Jacob Barnett, David Des Marais, Barry Logan  
**Lead contact email:** David Des Marais ([desmarais@fas.harvard.edu](mailto:desmarais@fas.harvard.edu))

#### [Phylogenetic History Predicts Leaf Responses to Dry-Down Among Congeners](#)

**Authors:** Kerri Mocko, Adrienne B. Nicotra, Cynthia S. Jones  
**Lead contact email:** Kerri Mocko ([kerri.mockco@uconn.edu](mailto:kerri.mockco@uconn.edu))

#### [Stomatal Development and Diversity in Cycads \(Order Cycadales\)](#)

**Authors:** P. Barry Tomlinson, Tracy M. Magellan, M. Patrick Griffith  
**Lead contact email:** Tracy M. Magellan ([tracym@montgomerybotanical.org](mailto:tracym@montgomerybotanical.org))

#### [The \*Rapunzel \(rzi\)\* Genes Regulate Growth Suppression in Maize Florets](#)

**Authors:** Harry Klein, Clinton Whipple, Madelaine Bartlett  
**Lead contact email:** Harry Klein ([harry.klein17@gmail.com](mailto:harry.klein17@gmail.com))

#### [Evolution of Developmental Regulators in the CLV1/TD1 Gene Clade](#)

**Authors:** Jarrett Man, Lei Liu, Tara Zadrozny, David Jackson, Madelaine Bartlett  
**Lead contact email:** Jarrett Man ([jaman@umass.edu](mailto:jaman@umass.edu))

#### [Evolution of PISTILLATA paralogs in \*Tarenaya hassleriana\*](#)

**Authors:** Suzanne de Bruijn, Gerco Angenent, Kerstin Kaufmann  
**Lead contact email:** Suzanne de Bruijn ([debruijn@fas.harvard.edu](mailto:debruijn@fas.harvard.edu))

#### [Transcriptomic Analyses Reveal Molecular Mechanisms Contributing to Structural Complexification of Petals in \*Nigella damascena\*](#)

**Authors:** Rui Zhang, Caiyao Zhao, Hong Liao, Peipei Wang, Xu Yao, Xiaoshan Duan, Huiqi Zhao, Hongyan Shan, Elena Kramer, Hongzhi Kong  
**Lead contact email:** Rui Zhang ([iloverdz@ibcas.ac.cn](mailto:iloverdz@ibcas.ac.cn))

#### [Drought Effects on Floral Traits and Their Heritabilities in \*Phlox drummondii\*](#)

**Authors:** Sevan Suni, Ben Ainsworth, Robin Hopkins  
**Lead contact email:** Sevan Suni ([suni@fas.harvard.edu](mailto:suni@fas.harvard.edu))

## [Stomatal Response to Humidity and CO<sub>2</sub> Implicated in Recent Decline in U.S. Evaporation](#)

**Authors:** Angela Ridgen, Guido D. Salvucci

**Lead contact email:** Angela Ridgen ([ajridgen@bu.edu](mailto:ajridgen@bu.edu))

## [In Planta Analysis of the Promoter Activity of Zct1, A Transcriptional Repressor of Alkaloid Biosynthesis in \*Catharanthus roseus\*](#)

**Authors:** Diana Bernal-Franco, Samuel Breselge, Jessica Weaver, Erin Cram, Carolyn Lee-Parsons

**Lead contact email:** Diana Bernal-Franco ([telomeros@gmail.com](mailto:telomeros@gmail.com))

## [Cold Treatment Regulates Expression of Phenology-Relevant Candidate Genes in the English Walnut, \*Juglans regia\* L](#)

**Authors:** Ashton Macfarlane, William E. Friedman

**Lead contact email:** Ashton Macfarlane ([macfarlane@college.harvard.edu](mailto:macfarlane@college.harvard.edu))

## [Effect of the Promoter on Long-Term Expression Stability in \*Chlamydomonas reinhardtii\*](#)

**Authors:** Samuel Breselge, Alexander Einhaus, Andre Jochums, Thomas Reinard, Erin J. Cram, Carolyn W.T. Lee-Parsons

**Lead contact email:** Samuel Breselge ([breselge.s@husky.neu.edu](mailto:breselge.s@husky.neu.edu))

## [Variable Dimerization of Maize B-Class MADS Box Transcription Factors](#)

**Authors:** Amanda Schragger-Lavelle, Pubudu Handakumbura, Jarrett Man, Edgar Demesa Arevalo, Dilay Ayhan, David Jackson, Courtney Babbitt, Madelaine Bartlett

**Lead contact email:** Amanda Schragger-Lavelle ([lavelle@bio.umass.edu](mailto:lavelle@bio.umass.edu))

## [Science in Real Life: A YouTube Series for Science Outreach](#)

**Authors:** Molly Edwards, Ramin Rahni

**Lead contact email:** Molly Edwards ([mollyedwards@g.harvard.edu](mailto:mollyedwards@g.harvard.edu))

## [Comparing \*Quercus suber\* L. Leaf Traits in Two Distinct Climate Regions of the Iberian Peninsula](#)

**Authors:** Kyra A. Pratts, Craig R. Brodersen, Mark S. Ashton

**Lead contact email:** Craig R. Brodersen ([craig.brodersen@yale.edu](mailto:craig.brodersen@yale.edu))

## [Hydraulic Tradeoffs in the Evolution and Diversification of Angiosperm Flowers](#)

**Authors:** Adam B. Broddy, Craig R. Brodersen

**Lead contact email:** Craig R. Brodersen ([craig.brodersen@yale.edu](mailto:craig.brodersen@yale.edu))

## [Prehistoric Plants Renewed: An Updated Lycopod Tree of Life](#)

**Authors:** Abigail Burrus, Alex Domburg, Andrew Leslie

**Lead contact email:** Abigail Burrus ([burrus@g.harvard.edu](mailto:burrus@g.harvard.edu))

## [The Stability of Leaf-Level Transpiration During Wind Gusts Requires A Constraint on Maximum Stomatal Conductance](#)

**Authors:** Fulton Rockwell, Abraham D. Stroock, N. Michele Holbrook

**Lead contact email:** Fulton Rockwell ([fulton.rockwell@gmail.com](mailto:fulton.rockwell@gmail.com))

## [Foliar Water Uptake Involves Unique Anatomical Adaptations in A Tree of Semi-Arid Environments](#)

**Authors:** Juan M. Losada, Miriam Diaz, N. Michele Holbrook

**Lead contact email:** Juan M. Losada ([juanlosada@fas.harvard.edu](mailto:juanlosada@fas.harvard.edu))

## [The Role of Wood Parenchyma and Fibers in Tree Hydraulics](#)

**Authors:** Kasia Ziemska, Sean M. Gleason

**Lead contact email:** Kasia Ziemska ([kasia.s.ziemska@gmail.com](mailto:kasia.s.ziemska@gmail.com))