

# Harvard Plant Biology Symposium 2016 Poster Session

Tuesday, May 3<sup>rd</sup>

## Interactive Effects of Photoperiod, Temperature, and Chilling on Phenology Across Latitudes

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## Under Long Term Soil Warming, Trees in a Northeastern Hardwood Forest Reallocated Carbon from Roots to Aboveground Woody Growth

**Authors:** William Werner, Michael Bernard, Francis Bowles, Jerry Melillo  
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## Dried Out, But Not Dead! Photosynthetic Resilience in Desert-Derived Green Microalgae During Multiple Desiccation/Rehydration Cycles

**Authors:** ZG Cardon, E Lopez Peredo, O Shapira, S Thomas, D Bruce  
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## Stomatal Control Banana Style: What's the "Wrong Way Response" Hiding?

**Authors:** Or Shapira, Yotam Zait, Amnon Schwartz, Edward Rastetter, Zoe Cardon  
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## Experimental Warming Delays Autumn Senescence in a Boreal Spruce Bog: Initial Results from the SPRUCE Experiment

**Authors:** Andrew Richardson, Morgan E. Furze, Donald M. Aubrecht, Thomas Milliman, W. Robert Nettles, Misha B. Krassovski, Paul J. Hanson  
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## Zygotic Dormancy Underlies Prolonged Seed Development in *Franklinia alatamaha*: A Most Unusual Case of Reproductive Phenology in Angiosperms

**Authors:** Kristel M. Schoonderwoerd, William E. Friedman  
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## Response of Foliar Traits and Phosphorus Fractions to Fertilization in a Tropical Forest: Understanding Plant Adaptations to Phosphorus Availability

**Authors:** Faming Wang, Qifeng Mo, Emma J. Sayer, Hans Lambers, Mary Heskel, Jianwu Tang  
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## Seasonality and Evolution of Leaf Defenses Across the Wild Dogwoods (*Cornus*)

**Authors:** Michael LaScaleia, Chase Mason  
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## Exploring the Transcriptomes of Texas *Phlox*

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### **Nonstructural Carbon Reserves in Temperate Tree Species**

**Authors:** Morgan Furze, Meghan Blumstein, Andrew Richardson, Moriah Carbone, Trevor Keenan

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### **Season Spotter: Citizen Science and PhenoCams**

**Authors:** Margaret Kosmala, Rebecca Cheng, Sandra Henderson, Andrew Richardson

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### **The *Aquilegia* JAGGED Ortholog Controls Primordium Initiation and Adaxial Cell Proliferation**

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### **Phloem Anatomy in Two Members of the Basal Angiosperm Lineage *Austrobaileyles***

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### **Reconstruction and Structural Analysis of Ancestral RuBisCO Proteins**

**Authors:** Victor Hanson-Smith, Nicholas Boekelheide, Zachary R. Adam, Betul Kacar

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### **How Do Trees Maintain Photosynthate Transport from Leaves to Roots as They Grow Taller?: A Study of The Ontogenetic Scaling of Phloem Sieve Tube Hydraulic Resistance with Tree Height in *Quercus rubra***

**Authors:** Laura Clerx, Noel M. Holbrook, Jessica Savage

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### **Multiscale Model of Light Harvesting and Non-Photochemical Quenching by Photosystem II in Plants**

**Authors:** Doran I.G. Bennett, Kapil Amarnath, Graham Fleming

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### **Optimizing Whole-Mount Confocal Microscopy for Ovules and Seeds**

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### **Predicting the Thermodynamics of Biochemical Redox Reactions Through Quantum Chemistry and Machine Learning**

**Authors:** Adrian Jinich, Sung-Jin Kim, Benjamin Sanchez-Lengeling, Elad Noor, Arren Bar-Even, Alan Aspuru-Guzik

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### **Modeling Exciton Dynamics in Biliproteins with HPC: Towards Nanoscale Control of Coherence**

**Authors:** Samuel M. Blau, Thomas Markovich, Doran I.G. Bennett, Alan Aspuru-Guzik

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### **Closure and Wilting Precedes Xylem Cavitation in Grapevine Leaves**

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