



## XII Colloquium on Plant Ecophysiology

Parque Katalapi, January 19-21, 2017, Región de Los Lagos Chile

### General Program

Thursday Jan 19	Friday Jan 20	Saturday Jan 21
9:00-11:00 Arrival and registration	08:00 <i>Breakfast</i>	08:00 <i>Breakfast</i>
	9:00-9:30  Mini-Lecture <b>Nicolás Franck</b> <i>Effect of source: sink balance on leaf and plant carbon dynamics of three fruit trees with different phloem loading strategies.</i>	9:00-9:30  Mini-Lecture <b>Lohengrin Cavieres</b> <i>"Invasive plants in the central Chilean Andes: patterns, mechanisms and consequences"</i>
10:30 <i>Coffee Break</i>	9:30-10:30  Short communications 2	9:30-10:30  <i>Morning Lecture</i> <b>Alfredo Saldaña</b> <i>"Functional Ecology of vascular epiphytes in the Southern temperate forest"</i>
	10:30 <i>Coffee Break</i>	10:30 <i>Coffee Break</i>
11:15-12:00  Noon Lecture <b>Bruce Osborne</b> <i>"Gunnera invasions and what they can tell us about evolutionary and ecosystem processes"</i>	11:30-12:00  Mini-Lecture <b>Alex Fajardo</b> <i>"Competition or facilitation: the ultimate role of cluster roots for Proteaceae species and others"</i>	11:30-12:00  Mini-Lecture <b>Claudio Pastenes</b> <i>"Water relations in grapevines"</i>
	12:00-12:45  Noon Lecture <b>María Fernanda Pérez</b> <i>"Comparative phylogeography of central Chile species: influence of functional traits on plant response to quaternary climatic fluctuations"</i>	12:00-12:45  Closing Lecture <b>Jeroni Galmés</b> <i>"Ecophysiological causes and consequences of RUBISCO variations in plants"</i>

<p><b>12:00-12:30</b></p> <p><i>Mini-Lecture</i>  <b>Verónica Briceño</b>  <i>Now, later or never: When do seeds of Alpine species germinate?</i></p>		
<p><b>13:00 Lunch</b></p>	<p><b>13:00 Lunch</b></p>	<p><b>13:30 Farewell lunch</b></p>
<p><b>15:00-15:30</b></p> <p><i>Mini-Lecture</i>  <b>Alejandra Zúñiga</b>  <i>"Plant-soil-microorganism interactions on native Southern South America species"</i></p>	<p><b>15:00-15:30</b>  <i>Mini-Lecture</i>  <b>Patricia Sáez</b>  <i>"Increasing temperature and its effects on photosynthetic performance of Antarctic vascular plants: field and laboratory conditions"</i></p>	
<p><b>15:30-16:30</b></p> <p>Short communications 1</p>	<p><b>15:30-16:30</b></p> <p>Short communications 3</p>	<p><b>16:00</b></p> <p>Departure</p>
<p><b>16:30 Coffee Break</b></p>	<p><b>16:30 Coffee Break</b></p>	
<p><b>17:30-18:15</b></p> <p><i>Evening Lecture</i>  <b>Frida Piper</b>  <i>"C dynamics in deciduous and evergreen species: Is it coordinated with nutrient storage?"</i></p>	<p><b>17:30-18:15</b></p> <p><i>Evening Lecture</i>  <b>Juan Pedro Ferrio</b>  <i>"Water on the rocks: exploring plant's ability to uptake water from dry soils"</i></p>	
<p><b>19:00</b></p> <p><i>"Cata en Kata"</i>  and  Dinner  <b>Marino Cabrera</b>  <b>Claudio Pastenes</b></p>	<p><b>19:00 Dinner</b></p>	
	<p><b>20:30-21:30</b></p> <p>Night discussion  <b>Luis J. Corcuera</b>  <i>"The future of Plant Ecophysiology courses and Colloquia in Katalapi"</i></p>	

# Full Program

## January 19 (Thursday)

### Colloquium opening

11:00 - 11:15 **Corcuera Luis** "Opening remarks and welcome" Universidad de Concepción, Chile.

11:15 - 12:00 **Opening Lecture by Bruce Osborne** "Gunnera invasions and what they can tell us about evolutionary and ecosystem processes" University College Dublin.

12:00 - 12:30 **Mini-lecture by Verónica Briceño<sup>1</sup>, Lohengrin Cavieres<sup>2</sup>, Yessica Perez<sup>1</sup> & Daniel Harris-Pascal<sup>1</sup>** "Now, later or never: When do seeds of Alpine species germinate?" (1) Universidad Austral de Chile, Chile. (2) Universidad de Concepción, Chile.

13:00 - 15:00 **Lunch**

15:00 - 15:30 **Mini-Lecture by Alejandra Zúñiga** "Plant-soil-microorganism interactions on native Southern South America species" Universidad Austral de Chile, Chile.

15:30 - 16:30 **Short communications 1:**

Claudia Reyes-Bahamonde<sup>1,2</sup>, Frida I. Piper<sup>2,3</sup> & Lohengrin A. Cavieres<sup>1,2</sup> "Variación estacional y altitudinal de Carbohidratos no estructurales en *Phacelia secunda* Gmel creciendo en los Andes de Chile central" (1) Universidad de Concepción, Chile. (2) Instituto de Ecología y Biodiversidad, Chile. (3) Centro de Investigaciones en Ecosistemas de la Patagonia (CIEP), Chile.

Fritz R., Parra L., Paula S. & Jiménez-Castillo M "Effect of *Chusquea quila* as a physical filter for the establishment of woody species in the temperate rain forest" Universidad Austral de Chile, Chile.

Tomás I. Fuenzalida<sup>1</sup> & Frida I. Piper<sup>2,3</sup> "Leaf re-flushing after complete defoliation enhances the resistance of a winter deciduous tree to the outbreak of a generalist moth species" (1) Pontificia Universidad Católica de Chile, Chile. (2) Centro de Investigación en Ecosistemas de la Patagonia (CIEP), Chile. (3) Instituto de Ecología y Biodiversidad, Chile.

Parra L "Variation of phylogenetic signal and evolutionary rate in functional traits correlations in *Nothofagus* genus" Universidad Austral de Chile, Chile.

16:30 - 17:30 **Coffee Break**

17:30 - 18:15 **Evening Lecture by Frida Piper** "C dynamics in deciduous and evergreen species: Is it coordinated with nutrient storage?" Centro de Investigación en Ecosistemas de la Patagonia, Chile.

19:00 "*Cata en Kata*" and Dinner by **Marino Cabrera and Claudio Pastenes**

## January 20 (Friday)

9:00 - 9:30 **Mini-Lecture** by Nicolás Franck, Zamorano D, Cáceres M, Díaz M, Fridman T & Pastenes C "Effect of source: sink balance on leaf and plant carbon dynamics of three fruit trees with different phloem loading strategies" Universidad de Chile, Chile.

### 9:30 - 10:30 **Short communications 2**

Sidonie Loiez & Frida I. Piper "Differences during bud break between deciduous and evergreen *Nothofagus*" Centro de Investigación en Ecosistemas de la Patagonia -Agrocampu Ouest - Rennes.

David Rodríguez "*Hydrangea serratifolia* (Hook. & Arn.) F. Phil., La trepadora más dominante en un bosque maduro: influencia comunitaria y ecosistémica en el bosque templado lluvioso" Universidad de Concepción, Chile.

Ana Fallard, Héctor Jiménez, Giovanni Larama, León A. Bravo "Control post-transcripcional de la expresión génica durante el ciclo de desecación-rehidratación en *Hymenophyllum caudiculatum* (Mart.) var. *productum* (K. Presl.)" Universidad de la Frontera, Chile.

Mabel Delgado, Frida Piper y Alejandra Zúñiga. "Higher waterlogging tolerance in shade tolerant evergreen species than in their light-demanding counterparts". Universidad Austral de Chile, Chile. Centro de Investigación en Ecosistemas de la Patagonia.

### 10:30 - 11:30 **Coffee Break**

11:30 - 12:00 **Mini-Lecture** by Alex Fajardo "Competition or facilitation: the ultimate role of cluster roots for Proteaceae species and others" Centro de Investigación en Ecosistemas de la Patagonia, Chile.

12:00-12:45 **Noon Lecture** by María Fernanda Pérez "Comparative phylogeography of central Chile species: influence of functional traits on plant response to quaternary climatic fluctuations" Pontificia Universidad Católica de Chile, Chile.

### 13:00 - 15:00 **Lunch**

15:00-15:30 **Mini-Lecture** by Patricia Sáez<sup>1</sup>, Jeroni Galmés<sup>2</sup>, Constanza Ramirez<sup>1</sup>, Leticia Poblete<sup>1</sup>, Lohengrin A. Cavieres<sup>1</sup> & León A. Bravo<sup>3</sup>. "Increasing temperature and its effects on photosynthetic performance of Antarctic vascular plants: field and laboratory conditions" (1) Universidad de Concepción, Chile. (2) Universidad de Islas Baleares, Spain. (3) Universidad de la Frontera, Chile.

### 15:30 - 16:30 **Short communications 3**

Carolina Hernández-Fuentes, José Ortiz & Lohengrin Cavieres "Is there any effect of the latitudinal provenance in the photosynthetic performance and limitations of *Colobanthus quitensis*?" Universidad de Concepción, Chile. Instituto de Ecología y Biodiversidad, Chile.

Paulina Pradel & León Bravo "Effect of warming on soil bacteria and its relationship with plant performance on *Deschampsia antarctica* and *Colobanthus quitensis*" Universidad de la Frontera, Chile.

Javiera Vargas "Efectos de la fertilización sobre la resistencia a la sequía en dos especies del matorral de Chile central" Universidad de Concepción, Chile.

Alonso Vigil T. & Wilfredo L. Gonzales "Contrasting functional traits of two shrubs (Capparaceae) from the Peruvian dry forest" Universidad Peruana Cayetano Heredia.

### 16:30 - 17:30 **Coffee Break**

17:30-18:15 **Evening Lecture** by Juan Pedro Ferrio "Water on the rocks: exploring plant's ability to uptake water from dry soils" Universidad de Concepción, Chile

19:00 - 20:30 **Dinner**

20:30 - 21:30 **Night discussion by Luis J. Corcuera** "The future of Plant Ecophysiology courses and Colloquia in Katalapi" Universidad de Concepción, Chile.

## **January 21 (Saturday)**

09:00 - 09:30 **Mini-Lecture by Lohengrin Cavieres** "Invasive plants in the central Chilean Andes: patterns, mechanisms and consequences" Universidad de Concepción, Chile. Instituto de Ecología y Biodiversidad, Chile.

09:30 - 10:30 **Morning Lecture by Alfredo Saldaña** "Functional Ecology of vascular epiphytes in the Southern temperate forest" Universidad de Concepción, Chile.

11:30 - 12:00 **Mini-Lecture by Claudio Pastenes** "Water relations in grapevines: contrasting responses on three varieties" Universidad de Chile, Chile.

12:00-12:45 **Closing Lecture by Jeroni Galmés** "Ecophysiological causes and consequences of RUBISCO variations in plants" Universidad de Islas Baleares, Spain.

13:00 **Farewell Lunch**

16:00 **Departure**