



IX Summer Colloquium on Plant Ecophysiology
Parque Katalapi, Pichiquillaie, Puerto Montt, Chile
 January 18-20th, 2014
<http://www.parquekatalapi.cl>



General Program

Time	Saturday January 18	Sunday January 19	Monday January 20
08:00-09:00	Breakfast	Breakfast	Breakfast
09:00-10:30	Registration	Short communications SESSION 3	Morning Lecture 9:15-10:15 Robert Turgeon “Why is there more than one mechanism of phloem loading? Mechanistic and ecological perspectives”
10:30-11:00	Registration	Coffee Break	Coffee Break
11:00-12:00	11:00 Registration 11:45 Luis Corcuera Welcome remarks	Morning Lecture 11:00-12:00 Dana Bergstrom “Establishing ANTOS - an Antarctic Nearshore and Terrestrial Observing System around Antarctica”	The Martin Canny Lecture 10:45-11:45 Marilyn Ball “No cushion for climate extremes”
12:00-13:00	Opening Lecture Jaume Flexas “How is the cell wall related to photosynthesis?”	Noon Lecture Rafael Oliveira “Diversity of responses to drought in a neotropical savanna scrubland”	Closing Lecture 11:45-12:45 Frida Piper “On becoming a tree at the southern Andes treeline”
13:00-14:30	Lunch	Lunch	Farewell lunch Farewell lunch
14:30-16:00	Short communications SESSION 1	Short communications SESSION 4 and Minilecture François Teste “Do complementary plant nutrient-acquisition strategies facilitate growth and nitrogen transfer to neighbours?”	
16:00-16:30	Coffee Break	Coffee Break	Participants departure
16:30-18:00	Short communications SESSION 2	Short communications SESSION 5	
18:15-19:15	Evening Lecture Michael Shane “REDUCE, REUSE and RECYCLE: metabolic adaptations in the champions of low phosphorus tolerance (Proteaceae)”	Evening Lecture Hans Lambers “Comparing cluster-root functioning in south-western Australian and Patagonian Proteaceae: a trade-off to maximise nutrient acquisition”	
19:30	Dinner	Dinner	
>21:30	Social activity	Round table discussion	



General Program

January 18 (Saturday)

Colloquium opening

11:45 **Corcuera Luis** (*U. de Concepción*): "Opening remarks and welcome".

12:00 **Opening Lecture by Jaume Flexas** (*U. des Illes Balears*): "How is the cell wall related to photosynthesis?"

13:00-14:00 **Lunch**

Session I

14:30-14:50 **Dimitre A. Ivanov** and Mark A. Bernards (*U. of Western Ontario*): Using chlorophyll fluorescence imaging to track and measure *Pythium irregulare* infection of American ginseng.

14:50-15:10 **Angela Bustos Salazar** (*U. Austral de Chile*): "Intraespecific variation to extreme hydric conditions in *Drimys winteri*; from the temperate South American Forests".

15:10-15:30 **Claudia Rabert**, Carla Alvear, Marjorie Reyes, Miren Alberdi, and León Bravo (*U. de La Frontera*): Assimilation of ammonium or nitrate supply in Antarctic vascular plants.

15:30-15:50 **Alejandra Flores** (*U. de Concepción*): "Updates in the PSI of two species from Hymenophyllaceae"

16:00-16:30 **Coffee break**

Session II

16:30-16:50 **Rafael Coopman**, E., Roke Rojas, Duncan A. Christie, Jaume Flexas and Jeroni Galmés. (*U. Austral de Chile*): Metabolic compensation of CO₂ assimilation in *Nothofagus pumilio* along an altitudinal gradient.

16:50-17:10 **Andrea Avila Valdés** (*U. Austral de Chile*): "Cluster Root development in South American Proteaceae that differ on edaphoclimatic conditions: *Embothrium coccineum* and *Orites myrtoidea*".

17:10-17:30 **José Neira** (*CEAF*): "Determination of the gas diffusion coefficient in soils from fruit orchards with different soil management".

17:30-17:50 **Rocío Urrutia-Jalabert**, Rossi, S., Deslauriers, A., Malhi, Y., Lara, A. (*U. of Oxford*): Environmental controls of daily stem radial change in the endangered *Fitzroya cupressoides* forests of southern Chile

17:50-18:10 **Antonio Escandón** (*U. de Concepción*) "Ontogenetic leaf display and leaf cohorts contribution on daily crown assimilation of *Eucryphia cordifolia* saplings grown under different light and water availabilities".

18:15-19:15 **Evening Lecture by Michael Shane** (*U. of Western Australia*): "REDUCE, REUSE and RECYCLE: metabolic adaptations in the champions of low phosphorus tolerance (Proteaceae)"

19:30 **Mixer and dinner**



January 19 (Sunday)

Session III

- 9:00-9:20 **Guillermo Toro** (CEAF): "Root respiration components in sweet cherry rootstocks with contrasting tolerance to hypoxia"
- 9:20-9:40 **Susana Paula**, Antonio Bartolomé Escandón, Roke Rojas, Loreto Morales, Luis J. Corcuera, Rafael E. Coopman (*U. Austral de Chile*). Different physiological constraints of sprouts and saplings explain the regeneration niche of *Eucryphia cordifolia*
- 9:40-10:00 **Alex Fajardo** (*Centro de Investigación en Ecosistemas de la Patagonia*): "An assessment of the ecosystem engineering quality of *Embothrium coccineum* (Proteaceae) in Patagonia, Chile"
- 10:00-10:20 **Ernesto Gianoli**, Fernando Carrasco-Urra (*U. de La Serena*): "Specific leaf mimicry in a climbing plant from the southern temperate rainforest"
- 10:20-10:40 **Karina Acuña** (*U. de Concepción*): "The presence of plastochromanol-8 plus α -tocopherol in *Hymenophyllum dentatum* Cav. may explain its higher tolerance to desiccation and rehydration cycles under high light"

10:40-11:00 **Coffee break**

11:00 **Morning Lecture by Dana Bergstrom** (*Australian Antarctic Division*): "Establishing ANTOS – an Antarctic Nearshore and Terrestrial Observing System around Antarctica"

12:00 **Noon Lecture by Rafael Oliveira** (*U. Estadual de Campinas*): "Diversity of responses to drought in a neotropical savanna scrubland"

13:00-14:00 **Lunch**

Session IV

14:30-14:50 **Beth Roskilly** (advised by Dr. Alex Fajardo, Dr. Anna Sala): The role of wood density in the trade-off between growth and longevity: examples from Chilean Patagonia

15:00-15:30 **Mini-lecture François Teste** (*University of Western Australia*): "Do complementary plant nutrient-acquisition strategies facilitate growth and nitrogen transfer to neighbours?"

15:30-16:00 **Coffee break**

Session V

16:00-16:20 **Patrick Hayes** (*U. of Western Australia*): "Nutrient resorption across the Jurien Bay chronosequence"

16:20-16:40 **Enrique Ostría** (*U. de Concepción*): "Heteroblasty of *Gevuina avellana*: An ontogenetic contingency approach".

16:40-17:00 **Michelle Morales** (CEAF): "CO₂ assimilation of different sweet cherry rootstocks grown in three different soils"

17:00-17:20 **Nicolás Franck**, Felipe Meza, Víctor García de Cortázar, Denisse Zamorano and David Arancibia (*Centro de Estudios de Zonas Áridas (CEZA), U. de Chile*): "Contrasting response of gas exchange to sink-source relationships in a deciduous vine crop and an evergreen tree crop".

17:20-17:40 Larama, G., Berríos, G., Gutiérrez, A. Manque, P. & **Bravo, L.A.** (*U. de La Frontera*): "Transcriptome of the desiccation-rehydration response of *Hymenophyllum cruentum*"

18:15 Evening Lecture by Hans Lambers (*U. of Western Australia*): "Comparing cluster-root functioning in south-western Australian and Patagonian Proteaceae: a trade-off to maximize nutrient acquisition"

19:30 **Dinner**

21:00 **Round table discussion: (To be defined):**



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January 20 (Monday)

Session VII

9:15 **Morning Lecture by Robert Turgeon** (*Cornell University*): "Why is there more than one mechanism of phloem loading? Mechanistic and ecological perspectives"

10:15 Coffee break

Session VIII

10:45 **The Martin Canny Lecture by Marilyn Ball** (*Australian National University*)

Ball M.C., Rolland V., Lenne T., Egerton J.J.G., Stanton D.E., Choat B., Sack L., Bryant G., Holbrook N.M. and Bergstrom D.M "No cushion for climate extremes" based on the work "No Cushion for climate extremes: Hydraulic attributes indicate vulnerability of iconic sub-Antarctic Alpine species to increasing drought stress in a changing climate."

11:45 **Closing Lecture by Frida Piper** (*Centro de Investigación en Ecosistemas de la Patagonia*): "On becoming a tree at the southern Andes treeline"

13:00-15:30 **Outdoors Farewell Lunch**