

Final Program

XVIII International Colloquium on Plant Ecophysiology

Tuesday 14th

Conference 1 (Chair, Luis Corcuera)

09:00: **Marilyn C. Ball** (The Australian National University) "Foliar water uptake makes similar contributions to water/carbon balances in an arid mangrove forest and a rainforest"

Short Communications 1. (Session chair: Marely Cuba)

09:40: **Pere Aguiló-Nicolau** (University of the Balearic Islands) "Measuring Rubisco isotope fractionation *in vitro*."

9:55: **Andrea Arredondo** (Universidad de Talca) "Treeline formation of *Nothofagus pumilio* and its relationship with bark yeasts"

10:10: **Enrique Ostria** (Universidad de Concepción) "Effect of nitrogen deficiency stress in *Chenopodium quinoa* mother plants on growth and physiology of their offspring."

Coffee Break

Conference 2 (Chair, León Bravo)

11:00, **Bruce Osborne** (University College Dublin) "Giant rhubarb at home and abroad"

Mini-Conference 1 (Session chair: Daniela Aros)

11:40, **Tomas Fuenzalida** (Universidad Adolfo Ibáñez) "Use of force-sensing clamps for passive monitoring of leaf thickness and turgidity via uniaxial compression."

Short Communications 2. (Session chair: Dariel Lopez)

12:10, **Carolina Sanhueza** (Universidad de Concepcion) "Early development under low salinity improves growth and stimulates antioxidant metabolism in *Colobanthus quitensis* (Kunth) Bartl."

12:25, **Gabriela Castillo** (Texas Tech University) "Improving HMW DNA Extraction: A Key to Successful Long-Read Sequencing".

Lunch

Mini-Conference 2 (Session chair: Carolina Sanhueza)

15:00, Ignacio Garcia Plazaola (University of the Basque Country) "Here comes the sun...: xanthophylls as components of light memory."

Short Communications 3. (Session chair: Carolina Alvarez)

15:30, Catalina Castro (Universidad de Concepción) "Effect of nitrogen deficiency stress in Chenopodium quinoa mother plants on growth and physiology of their offspring".

15:45, Flavia Cresta (Universidad de Concepción) "Nursery techniques to improve water stress resistance traits in two shrub species from Mediterranean central Chile".

16:00, Karina Acuña (Universidad de Concepción) "High temperature tolerance of photosynthetic tissues in high Andean plants"

Wednesday 15th

Conference 2 (Chair, Marilyn Ball)

09:00: Jaume Flexas (Universitat de les Illes Balears-INAGEA) "Measuring photosynthesis in climatically extreme environments"

Short Communications 4. (Session chair: Carolina Hernandez)

09:40: Dariel López (Universidad de la Frontera) "Using leaf manganese concentrations to estimate root carboxylate exudation strategies in South-American temperate rainforests on phosphorus-impooverished soils."

9:55: Carolina Alvarez (Universidad de Concepción) "Evidence of hydraulic vulnerability segmentation in Prunus dulcis cultivars during drought"

10:10: Fabian Pereira (Universidad de la Frontera) "Identification of plant species from southern South America that potentially use a carboxylate-releasing strategy to mobilize phosphorus from soil."

Coffee Break

Conference 4 (Chair, Jaume Flexas)

11:00, Jie Liang (Australian National University): "What water use strategy does plants adopt under varying spatiotemporal environmental conditions?"

Mini-Conference 3 (Session chair: Karina Acuña)

11:40, **Beatriz Fernandez-Marín** (University of the Basque Country) “Green tissues in the white season: potential cross-tolerance to freezing and desiccation in ferns”

Short Communications 5. (Session chair: Tomás Fuenzalida)

12:10, **Eliana Bustos** (Universidad de Talca) “Allocation of photoassimilates in *Quillaja saponaria* after a period of carbon deprivation”

12:25, **Rodrigo Viveros** (Universidad de Concepción) “Effects of Growth Temperature on Photosynthesis in Plants from the Andes of Central Chile”

Lunch

Mini-Conference 4 (Session chair: Gerardo Alejo)

15:00, **Marely Cuba** (Universidad de Concepcion) “Are Antarctic populations of *Colobanthus quitensis* the most salinity tolerant?: a field analysis”

Short Communications 6. (Session chair: Pere Aguiló- Nicolau)

15:30, **Pedro Ferreira** (Universidade de São Paulo - Piracicaba) “Unveiling Resilience: Transcriptomic Insights into Desiccation-Tolerant Extremophile Plant Species”

15:45, **Carolina Hernández** (1Subgerencia de Viveros y Biotecnología. ARAUCO) “Red color as a plant quality indicator in Eucalyptus: myth or reality?”.

16:00, **Carla Sandoval** (Universidad de la Frontera) “Biochemical characterization of aluminum-tolerant bacteria isolated from roots of *Gevuina avellana* growing in acidic soils with high aluminum bioavailability”

Thursday 16th

Short Communications 7. (Session chair: Rodrigo Viveros)

09:40: **Enrique Ostria** (Universidad de la Frontera) “Physiological responses of two contrasting populations of *Araucaria araucana* to heat stress”

Mini-Conference 5 (Session chair: Lohengrin Cavieres)

9:55, **Gerardo Alejo** (Texas Tech University) “Evolution of vegetative desiccation tolerance: Role of gene family rearrangements and priming”

10:25, **Daniela Aro** (Purdue University) ““Do CAM ferns really exist?”