



PROGRAMA

Miércoles, 14 de Febrero de 2024

08:30-09:30: *Registro de participantes y entrega de documentación (Hall del Auditorio de Caixaforum)*

09:30-10:00: *Acto de apertura del Simposio:*

Miguel Gutiérrez López, Director Gerente del Centro de Investigación y Tecnología Agroalimentaria de Aragón (CITA)

Manuel Matamoros Galindo, Director de la Estación Experimental de Aula Dei del CSIC

María Jesús Lazaro Elorri, Delegada Institucional en Aragón del CSIC

Montse Hernández Martín, Jefa de la Oficina de Medio Ambiente, Acción Climática y Salud Pública del Ayuntamiento de Zaragoza

10:00-11:00: **Conferencia Inaugural**

*Maurizio Mencuccini (CREAF): *Scaling plant hydraulic properties from tissues to biosphere. Can it be done and how?**

11:00-11:30: *Pausa-Café*

11:45-13:00: **Sesión I: “Relaciones hídricas en vegetación natural”.** *Moderador: Juan Pedro Ferrio Díaz*

11:45-12:00: *Reflections on why angiosperms acquired a hydroactive stomatal regulation mechanism mediated by ABA. A. Díaz-Espejo, J. Pichaco, C.M. Rodriguez-Dominguez.*

12:00-12:15: *A meta-analysis study applied to the characterization of the photosynthetic apparatus performance under changing environmental conditions. M. Ancín, A.L. Gámez, I. Jauregui, J. Galmés, R.E. Sharwood, G. Erice, E.A. Ainsworth, D.T. Tissue, A. Sanz-Sáez, I. Aranjuelo.*



12:15-12:30: *Ontogenetic plasticity in drought resistance: an underrated factor for predicting the success in seedling recruitment. The case of *Hypericum balearicum*.* M. Carriquí, M. Capó, C. Cardona, T.J. Far, J. Flexas, P.M. Mir, R. Perea, I. Aranda.

12:30-12:45: *Scaling relationships between xylem and phloem in oak petioles.* R. Martín-Sánchez, D. Sancho-Knapik, J.J. Peguero-Pina, D. Alonso-Forn, J.P. Ferrio Díaz, M. Mencuccini, E. Gil-Pelegrín.

12:45-13:00: *Plant community assembly in relation to water and carbon fluxes in a degraded Mediterranean shrubland.* A. Vilagrosa, L. Morcillo, A. Carrara, R. López, E. Mas, C. Grossiord.

13:30-14:30: *Comida*

15:00-16:00: **Sesión I (continuación): “Relaciones hídricas en vegetación natural”.**
Moderador: Antonio Díaz Espejo

15:00-15:15: *Variability in branch-scale hydraulic capacitance across Europe.* S. Hernando, O. Binks, J. Martínez-Vilalta, M. Mencuccini.

15:15-15:30: *Physiological and morphological responses of *Pinus pinaster* Ait. and *P. radiata* D. Don provenances to imposed drought.* C. Pinto, A. Correia, P. Scotti-Campos, J. Semedo, M. Santos, A.P. Rodrigues, R. Moreira, I. Pais, P. Vasilenko, C. Faria, T. Soares David, F. Costa e Silva.

15:30-15:45: *Killing me softly: Key traits determining time to hydraulic failure and risk to drought-induced mortality.* J.M. Torres-Ruiz.

15:45-16:00: *Structural and water relations traits determining leaf tolerance to critical dehydration: A case study in California oaks.* M. Nadal, E. Barragan, E. Bobich, R. Martín-Sánchez, J.J. Peguero-Pina, D. Sancho-Knapik, C. Scoffoni, E. Gil-Pelegrín.

16:00-16:30: *Pausa-Café*

16:30-17:30: **Visionado de Pósters (sesión 1)**

18:00-19:00: *Visita cultural al Palacio de la Aljafería*



Jueves, 15 de Febrero de 2024

09:00-10:45: Sesión II: “Aspectos genéticos y moleculares de las relaciones hídricas en plantas”. Moderador: Jorge Marques da Silva

09:00-09:30: *The search for genes and gene products to be used as molecular markers in the selection of Quercus ilex elite genotypes resilient to stresses associated to the decline syndrome and climate change.* M.D. Rey, M. Labella-Ortega, T. Hernández-Lao, M. Tienda-Parrilla, M. Muñoz-Triviño, A.M. Maldonado-Alconada, M.Á. Castillejo, J.V. Jorrín-Novó.

09:30-09:45: *Evaluation of the effect of drought stress on fruit quality of transgenic strawberry plants with cell wall encoding genes down regulated.* C. Rodríguez-Hiraldo, S. Aguado, S. Posé, C. Paniagua, R. Blanco-Portales, J. Muñoz-Blanco, M.A. Quesada, A.J. Matas, J.A. Mercado.

09:45-10:00: *Involvement of abscisic acid on root hydraulic conductivity and aquaporin regulation by a plant growth-promoting rhizobacteria under drought conditions at two different temperatures.* R. Aroca, Á.M. Zamarreño, S. Molina, M.C. Perálvarez, J.M. García-Mina, J.M. Ruiz-Lozano.

10:00-10:15: *Rice root-specific E3-ubiquitin ligases in plant-microbe interactions under low water availability: A strategy for a more sustainable production?* S. Duarte, T. Lourenço, P. Fareleira, M.M. Oliveira.

10:15-10:30: *Vegetative and reproductive hydraulic adjustment in grapevine organs under deficit irrigation: physiological and molecular aspects.* M. Damásio, C. Pinto, H. Ohlig, T. Soares-David, J. Silvestre, L. Carvalho, O. Zarrouk.

10:30-10:45: *Field-Based Transcriptomics Reveals Insights into Drought Tolerance Mechanisms in Tomato Plants: Bridging the Gap Between Greenhouse Experiments and Farmer’s Needs.* A. Juan-Cabot, M. Fullana-Pericàs, P. Cerdá, G. Romero, J. Medina, J. Galmés, M.À. Conesa.

10:45-11:15: Pausa-Café

11:15-13:15: Sesión III: “Estrés hídrico en cultivos”. Moderadora: Olfa Zarrouk

11:15-11:30: *Impact of drought stress on yield and seed quality of Pisum sativum cv. Tom Thumb.* J. Machado, M. Nunes da Silva, M.W. Vasconcelos, C.S. Santos.

11:30-11:45: *Effect of Drought Stress on Water Relations in Two Almond Cultivars Grafted onto Different Rootstocks.* S. Nasrolahpour-moghadam, J. Montenegro, M. Fattahi, G. Rabiei, B. Shiran, Y. Gogorcena.



11:45-12:00: *Biostimulant activity of Galaxaura rugosa seaweed extracts against water deficit stress in tomato seedlings involves activation of ABA signaling.* S. Morales-Sierra, J.C. Luis, D. Jiménez-Arias, N.M. Rancel-Rodríguez, A. Coego, P.L. Rodríguez, M. Cueto, A.A. Borges.

12:00-12:15: *Use of Amino Acids to Combat Water Stress in Vineyards.* F. Lopes de Macedo, J.F. Teixeira Ganança, H. Nóbrega¹, J. G.R. de Freitas, M. A.A. Pinheiro de Carvalho.

12:15-12:30: *Impact of rhizospheric microorganisms on physiological performance of grapevines under current and future environmental conditions.* D. Kozikova, I. Pascual, N. Goicoechea.

12:30-12:45: *Magic beans or the miracle of tradition? Resilient bean landraces from Muniesa as a source of drought-adapted, seed-borne biofertilizers.* T. Gil, I. Rebelo Romão, C. Mallor, J.I. Vílchez.

12:45-13:00: *Enhancing Maize (Zea mays) Resilience to Drought Stress Through Seed-Associated Microbiota.* I. Rebelo Romão, T. Gil, L.A. Lopes de Carvalho, J. do Carmo Gomes, A. Sousa, R. Teixeira, F. Kasa, A. Katamadz, O. Vergara-Diaz, R. Vicente, J.I. Vílchez.

13:00-13:15: *Estudio del comportamiento hídrico de la higuera, variedad Calabacita, en condiciones de riego en Extremadura.* M.J. Moñino, A. Vivas, Á. Caro, P. Redondo, M.H. Prieto.

13:30-14:30: *Comida*

15:00-15:15: **Entrega del Premio Ibérico de Investigación a la Mejor Tesis en Relaciones Hídricas en Plantas**

15:15-16:15: **Conferencia de la premiada**

Nieves Lavado Rodas: *Estudio del efecto a corto y medio plazo de la técnica del “forzado de yemas” sobre la productividad y la calidad de la vendimia ‘Tempranillo’ en Extremadura*

16:30-17:00: *Pausa-Café*

17:00-18:00: **Visionado de Pósters (sesión 2)**



**XVI SPANISH-PORTUGUESE SYMPOSIUM
ON PLANT WATER RELATIONS**
NEW SOLUTIONS FOR ANCIENT CHALLENGES
Zaragoza 14-16 FEB 2024

18:00-18:30: *Reunión del Grupo de Relaciones Hídricas de la Sociedad Española de Biología de Plantas*

21:30: *Cena del Congreso en el Restaurante "La Lobera de Martín"*



Viernes, 16 de Febrero de 2024

09:00-11:00: Sesión IV: “Nuevas metodologías para el estudio de las relaciones hídricas en plantas”. Moderador: Eustaquio Gil Pelegrín

09:00-09:30: *Air-coupled broadband ultrasounds to study water relations in leaves.* I. Gómez Álvarez-Arenas, D. Sancho-Knapik, J.J. Peguero-Pina, E. Gil-Pelegrín

09:30-09:45: *Determining stomatal response to vapour pressure deficit from gas exchange measurements: conceptual and methodological challenges.* J.P. Ferrio, D. Sancho-Knapik, J.J. Peguero-Pina, A. López-Ballesteros, M. Nadal, E. Gil-Pelegrín.

09:45-10:00: *Real-time trunk water potential combined with soil water content for precise irrigation in nectarine trees.* M.R. Conesa, W. Conejero, A.B. Mira-García, J. Vera, M.C. Ruiz-Sánchez.

10:00-10:15: *A new empirical framework to quantify soil and atmospheric forcing on plant water status.* M. Mencuccini, O. Binks, K. Novick, A. Konings, W.R.L. Anderegg, R. Poyatos, J. Martínez-Vilalta.

10:15-10:30: *Relationship between trunk water potential and other plant-based indicators for continuous monitoring tree water status.* V. Blanco, L. Kalcsits.

10:30-10:45: *Fostering Low-cost Drought-phenotyping. Part I: Designing and mounting a custom-made multi-image platform.* M. Abreu, M. Calejo Pires, G. Evans, J. Soares Augusto, M. Vitorino, P. Correia, J. Marques da Silva.

10:45-11:00: *Fostering Low-cost Drought-phenotyping. Part II: Testing a custom-made system with Arabidopsis thaliana and Vitis sp.* J. Melo, A. Figueiredo, A.R. Matos, J. Marques da Silva.

11:00-11:30: Pausa-Café

11:30-12:30: Sesión V: “Aspectos relacionados con el movimiento de agua en plantas”. Moderadora: Clara Pinto

11:30-11:45: *Effect of rootstock on xylem embolism vulnerability in grapevine: from leaf to stem.* L. Flor, M. Carriquí, G. Toro, I. Buesa, A. Sabater, I. Gómez, J. Bota, H. Medrano, J.M. Escalona.

11:45-12:00: *Polyploid trees and water use efficiency: experiments with subtropical fruit crops.* N. Blanco-Moure, A. Fonollá, J.I. Hormaza, J.M. Losada.



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12:00-12:15: *Evaluation of Huber value role in carbon and water relationships across fruit tree species.* V. Hernandez-Santana, C.M. Rodriguez-Dominguez, A. Perez-Martin, D. Benzal, F. Rossi, J. Sebastian-Azcona, A. Montero, L.F. Perez-Romero, A. Diaz-Espejo.

12:15-12:30: *Plant water relations in wild tomatoes and relatives are better explained by leaf venation traits than by hydraulics.* M.À. Conesa, J.J. Peguero-Pina, C.D. Muir, A. Molins, E.J. Roldán, E. Gil-Pelegrín, J. Galmés.

12:30-13:00: *Acto de Clausura. Foto de Grupo.*