

ICT INTERNATIONAL WORKSHOP: PLANT HYDRAULICS AND WATER RELATIONS

VENERDÌ 28 MARZO 2025

ore 09:00 – 17:00

**Aula Magna del Dipartimento Scienze Agrarie,
Alimentari e Agro-ambientali**

9:00 – 9:15 Registration

9:15–9:20 Director's Welcome Remarks

9:20 – 9:35 Challenges and Opportunities in Measuring Plant hydraulics and water relations. À. Puig-Sirera

9:35 – 10:05 Principles and measurements of plant water relations. B. Umali

10:05 – 10:20 Psychrometer chamber appreciation. F. Rigato

10:20 – 11:20 Psychrometer Demo installation in leaves and stems. F. Rigato and B. Umali

11:20 – 12:20 Plant water use measurement using sap flow technique. F. Rigato

12:20 – 13:20 Lunch break.

13:20 – 14:50 Continuation of Psychrometer Demo and Measurement protocols. B. Umali

14:50 – 15:20 Introduction to ICT IoT Systems. B. Umali

15:20 – 16:50 Basic data interpretation of sap flow and psychrometer; managing devices (uninstalling, cleaning, storage). B. Umali and F. Rigato

Presenters



Àngela Puig-Sirera

Àngela is a researcher in Hydraulics & Agricultural Hydrology at the AgrHySMo Lab, University of Pisa, specializing in feed-forward and feedback-control approaches to monitor and manage water status in sparse crop systems. Her research integrates energy balance models, GIS, and remote sensing to identify crop water stress in agroecosystems and urban green environments.



Ben Umali

Ben has backgrounds in forestry, GIS and soil science and obtained his PhD in Agriculture from the University of Adelaide. He is Plant Application Scientist at ICT International. This role enables him to work with many scientists across the world in the measurement of plant water status.



Eliana Francesca Rigato

Fran has a Master of Science degree in Forestry and Environmental Science from the University of Padova (Italy). She gained extensive field work experience in the plant industry, native ecosystems management and protection after migrating to Australia in 2016. She has been a Forestry scientist at ICT since 2019 and worked mainly in technical sales, field installations and training customers in soil, plant and environmental monitoring solutions.

for info contact: Angela Puig-Sirera, angela.puig@unipi.it and/or Lorenzo Bonzi, lorenzo.bonzi@phd.unipi.it