

May 15th 2025, 10 am – 1 pm EET, Israel time

Multidisciplinary Webinar

Integrating Digital Agriculture, Urban Forestry, and Agroecology

Registration LINK : [Click here](#)

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| 10:00-10:05 | Gathering

Introduction and motivation – Moderator: Rina Kamenetsky |
| 10:05-10:15 | Welcome and introduction to the Green city research center in Volcani, Rina Kamenetsky, Volcani Institute, Israel |
| 10:15-10:35 | "From Cities to Citrus: How Urban Vegetation Modulate Medfly Populations in Orchards", Yafit Cohen, Volcani Institute, Israel

Fruit Flies – Moderator: Michael Ben-Yosef |
| 10:35-10:50 | "Ecophysiological aspects of fruit fly distribution in agroecosystems", Michael Ben-Yosef, Volcani Institute, Israel |
| 10:50-11:05 | "Invasion of Bactrocera dorsalis in tropical islands of the Indian Ocean, possible implications of urban habitats" , Helene Delatte, CIRAD, France |
| 11:05-11:20 | "Precision management of major fruit fly pest", Nikos Papadopoulos, University of Thessaly, Greece

Urban forestry – Moderator: Yakir Preisler |
| 11:20-11:35 | "How to identify future urban tree species using key hydraulics traits?", Bernard Schuldt, TUD Dresden University of Technology, Germany |
| 11:35-11:50 | "Urban Tree Ecophysiology at the Interface of Urban and Rural Ecosystems", Yakir Preisler, Volcani Institute, Israel |
| | Digital Agriculture – Moderator: Yafit Cohen |
| 11:50-12:05 | "From data to decisions - the digital future of agriculture", Spyros Fountas, University of Athens, Greece |
| 12:05-12:50 | Discussion and Q&A |



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Short information about the speakers



Nikos Papadopoulos, University of Thessaly, Greece

Professor of Applied Entomology at the University of Thessaly, Greece since 2004. He received his PhD in Entomology from the Aristotle University of Thessaloniki, and then he pursued post-doctoral training at the University of California Davis (2001 – 2003). Receiving a scholarship from OECD, he worked at the University of California as visiting scholar in 2011. He is part of the council of the International Organization for Biological Control and the Plant Health Panel of the European Food Safety Authority. His group has awarded many competitive grants funded from the European Union, the International Atomic Energy Agency, the National Institute of Health (USA) and he served as the coordinator of the Horizon 2020 project FF-IPM.



Bernhard Schuldt, TUD Dresden University of Technology, Germany

Prof. Dr. Bernhard Schuldt specializes in forest ecology, ecophysiology and plant hydraulics. His research aims at identifying plant responses to climate change, causes and consequences of drought-induced tree mortality and key traits with causal relationship to climatic stressors. Thereby, he works on improving our understanding of the functioning of natural and artificial ecosystems.”

He is a Vice Dean of Research, Faculty of Environmental Sciences, TUD Dresden University of Technology.



Spyros Fountas, Agricultural University of Athens, Greece

Spyros Fountas is a Professor of Agricultural Engineering at the Agricultural University of Athens and Editor-in-Chief of Smart Agricultural Technology (Elsevier). He previously served as Editor-in-Chief of Computers and Electronics in Agriculture (2014–2021). He holds a BSc in Agricultural Sciences from Greece (1993), an MSc in Management Information Systems from Cranfield University, UK (1998), and a PhD in Systems Analysis on Precision Agriculture from Copenhagen University, Denmark (2004). He coordinated seven H2020 and Horizon Europe projects (e.g., Smart-AKIS, OPTIMA, BEATLES) and has participated in numerous other projects.



Hélène Delatte, CIRAD, France

Dr. Hélène Delatte is an entomologist and population geneticist leading one of the three teams of the PVBMT unit (Réunion, France) focused on ecological dynamics in island environments. She earned her PhD from Wageningen University (Netherlands) in 2005 and her HDR diploma in 2013. She holds a permanent researcher position at CIRAD since 2008. Her research covers insect bio-ecology, population genetics, virus interactions, and behavior, working on several insect-vector systems. Dr. Delatte has coordinated or participated in over 15 national and international projects funded by the EU, FAO/IAEA, and others. She serves on the scientific committee of TEAM (Tephritid Workers of Europe, Africa, and the Middle East) since 2012.



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Rina Kamenetsky-Goldstein, ARO, Volcani institute, Israel

Prof. Dr. Rina Kamenetsky-Goldstein is a senior research scientist at the ARO and a Professor at the Hebrew University of Jerusalem and at the Henan University of Science and Technology in China. She serves as the scientific director of the Interdisciplinary Center GREEN CITIES – Israeli Research and Development for Urban AgroEcology. Her research focuses on the mechanisms controlling flowering and dormancy in geophytes and herbaceous perennials, strategies and technologies for horticultural crop development, and market-oriented biotechnology in horticulture.



Yafit Cohen, ARO, Volcani institute, Israel

Dr. Yafit Cohen is a senior research scientist at the Institute of Agricultural and Biological Engineering at ARO. She is an adjunct faculty at the Faculty of Agriculture, Hebrew University, and teaches GIS with focus on precision agriculture. Her scientific interests are remote-sensing for precision and sustainable agriculture and spatio-temporal analysis of pests in agricultural environments. She is leading long-term studies: 1) to improve fruit flies monitoring and control including the development of automatic traps and SDSS for Medfly control; 2) To improve irrigation using thermal UAV imagery and multi-spectral satellite imagery.



Michael Ben-Yosef, ARO, Volcani institute, Israel

Dr. Michael Ben-Yosef is a research entomologist at the Institute of Plant Protection, ARO, specializing in the physiology of pest insects. He earned a B.Sc. in Biology (2003) from the Faculty of Mathematics and Natural Sciences at the Hebrew University of Jerusalem, followed by an M.Sc. (2008) and Ph.D. (2014) in Agroecology and Plant Protection at the Faculty of Agriculture. He then completed a postdoctoral fellowship at the Koret School of Veterinary Medicine (2015–2018). His research focuses on insect ecophysiology, insect-plant-microbe interactions of agricultural importance, abiotic stress resistance, microbiome interactions, interspecific competition, and climate tolerance, with an emphasis on factors contributing to insect success in agroecosystems.



Yakir Preisler, ARO, Volcani institute, Israel

Dr. Yakir Preisler is a plant ecophysiologicalist and Principal Investigator of the Urban Forest Lab, studying how trees respond to climate change and urban environments. His research focuses on tree functionality under urban stress, including mitigation of the urban heat island effect. Yakir earned his Ph.D. from the Hebrew University in collaboration with the Weizmann Institute and completed postdoctoral research at Harvard University. He founded the Urban Trees Ecophysiology Network (UTEN) and leads research on how plants adapt to urbanization, examining abiotic stress, drought, climate change, and phloem-xylem interactions. His work also explores stomatal regulation and tree hydraulics in cities, aiming to develop strategies for enhancing urban greenery and promoting sustainable urban development.



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