











2nd RECROP Annual Meeting - COST Action CA22157

Climate-Proof Crop Reproduction:

from lab to farm

Day 1: May 13, 2025	
Time	Event
9:30 - 13:00	Registration KEDEA building, Aristotle University of Thessaloniki
10:00 - 12:30	MC member meeting (only MC members allowed)
12:30 - 13:00	Welcome Coffee
13:00 - 13:30	Welcome and RECROP COST Introduction (Sotirios Fragkostefanakis)
13:30 - 14:10	Keynote Speaker Anja Geitmann (McGill University, Canada) Thermotolerance and invasive growth in the male gametophyte
14:10 - 18:00	Session 1: Plant Reproduction Under Abiotic Stresses Chairs: Michal Lieberman-Lazarovich & Ariola Bacu
14:10 - 14:30	Thomas Dresselhaus (University of Regensburg, Germany) Abiotic stresses affect vegetative and reproductive development in maize differently
14:30 - 14:50	Helene Robert Boisivon (Masaryk University, Czech Republic) Unraveling the process of thermoregulation during the seed development in Brassica napus
14:50 - 15:10	Natasa Cerekovic (University of Banja Luka, Bosnia Herzegovina) Reproductive stage sensitivity of maize to water and temperature stress across two distinct pedoclimatic regions in Bosnia and Herzegovina
15:10 - 16:00	Coffee Break & Poster Session I
16:00 - 16:20	Marta A. Mendes (University of Milan, Italy) Regulation of Ovule Number and Fertility by DRM Methyltransferases During Drought Stress
16:20 - 16:40	Petra Prochazkova Schrumpfova (Masaryk University, Czech Republic) From Gametophytes to Sporophytes: Investigating Plant Motif Distribution with GOLEM
16:40 - 17:00	David Honys (Institute of Experimental Botany, Czech Academy of Sciences, Czech Republic) The role of eIF3 in the control of pollen tube growth and thermotolerance













Time	Event
17:00 - 17:20	Konstantinos Vlachonasios (Aristotle University of Thessaloniki, Greece) Histone Acetyltransferase GCN5 and the Associated Coactivators ADA2 - From Evolution of the SAGA Complex to the Biological Roles in Plants
17:20 - 17:40	Jan Fila (Institute of Experimental Botany, Czech Academy of Sciences, Czech Republic) Unveiling the molecular function of the nascent polypeptide-associated complex subunit beta in Arabidopsis thaliana
17:40 - 17:45	Alison Tidy (University of Nottingham, UK) Large scale phenotyping looking at temperature stress on reproduction in Brassica diversity set
17:45 - 17:50	Michal Lieberman Lazarovich (Volcani Center, Israel) Heat stress response in commercial tomato varieties – from lab to farm
17:50 - 17:55	Stylianos Poulios (Aristotle University of Thessaloniki, Greece) The Arabidopsis thaliana SPATULA, CLAVATA1 and GCN5 genes interact to regulate gene expression and gynoecium development
17:55 - 18:30	Poster Session I (continued)
20.00	Opening Event at OMILOS beach club

Day 2: May 14, 2025	
Time	Event
09:00 - 13:10	Session 2: Abiotic Stress Sensing, Signalling, and Response Chairs: Marta Mendes & Konstantinos Vlachonasios
09:00 - 09:40	Keynote Speaker: John H. Doonan (Aberystwyth University, UK) High Throughput Phenotyping for Weather-Resilient Crop Development at the National Plant Phenomics Centre, Aberystwyth
09:40 - 10:00	Natasa Lukic (University of Banja Luka, Bosnia Herzegovina) Biochemical and molecular adaptations of two wheat genotypes to waterlogging stress and recovery
10:00 - 10:20	Guillaume Ramstein (Aarhus University, Denmark) Detecting effects of protein-coding variants by 3D structure prediction: application in a maize nested association mapping panel
10:20 - 10:40	Artemis Perraki (University of Toulouse, France) Unravelling the role of CaM/CMLs in early pollen development
10:40 - 10:45	Damla Turan Büyükdinç (Recep Tayyip Erdogan University, Turkey) An Evaluation of Drought Stress Responses in Mutant Carrot Callus Tissue
10:45 - 10:50	Meenakshi Kanwar (Indian Institute of Technology Roorkee, India) The Curious Case of a Class C HSF in Pisum sativum (Garden Pea): A Molecular Enigma
10:50 - 11:30	Coffee Break & Poster Session I (continued)

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Time	Event
11:30 - 11:50	Avilien Dard (VIB Ghent, Belgium) Surfing the ROS wave: HDA6s journey from chromatin to cytosolic stress granules. Unveiling redox-regulation of protein phase separation during heat stress.
11:50 - 12:10	Usman Khalid Chaudhry (Nigde Omer Halisdemir University, Turkey) <i>Investigation of different colored carrot cultivars in response to single and combination of drought and heat stresses</i>
12:10 - 12:30	Francesca Resentini (University of Milan, Italy) Mitochondrial Calcium Signaling in Plants: Insights into Stress Response Mechanisms
12:30 - 12:35	Rafail Gritzas (University of Toulouse, France) Investigating the role of SERK1 co-receptor in regulating plant response to temperature elevations
12:35 - 12:40	Bianca Maria Orlando Marchesano (University of Milan, Italy) Development of the Adult Plant Projective Imaging (APPI) System: Democratizing Imaging for Non-Model Plants
12:40 - 12:45	Anna Velliou (Agricultural University of Athens, Greece) The effects of Dynamic Controlled Atmosphere in physiological and quality traits of Hayward kiwifruit during cold storage
12:45 - 14:00	Lunch Break
14:00 - 15:50	Session 3: Biotechnology, Gene editing and Systems Biology Approaches to Decipher Crop Resilience Chairs: Antonio Granell & Olha Lakhneko
14:00 - 14:40	Keynote Speaker: Francesca Desiderio (CREA – Research Centre for Genomics and Bioinformatics, Italy) Combining genomic and phenotyping approaches to study the genetic diversity for drought resilience in durum wheat
14:50 - 15:10	Panagiotis Kalaitzis (Mediterranean Agronomic Institute of Chania, Greece) A tomato prolyl 4 hydroxylase 3 and Fascilin-like Arabinogalactan proteins 1 and 2 are involved in tomato abscission
15:10 - 15:30	Thomas Roitsch (University of Copenhagen, Denmark) Determination of metabolic biosignatures by cell physiological phenotyping to assess predictors of crop resilience and improve the lab to field translation
15:30 - 15:35	Christina Skodra (Aristotle University of Thessaloniki, Greece) Decoding the molecular basis of superficial scald development in apples using a multi-omics and functional approach
15:35 - 15:50	Coffee Break
15:50 - 16:10	Special RECROP Session: Antonio Granell (Polytechnic University of Valencia, Spain) HarnesstomDB v1.0: A Comprehensive Multi-Omics Resource for Tomato Genetic Diversity
16:10 - 16:30	Musa Kavas (Ondokuz Mayıs University, Turkey) Increase of Lateral Roots in Tomato Plants Using Crispr-Combo Technology
16:30 - 16:50	Adi Avni (Tel Aviv University, Israel) Bio-Sensors for Precision Agriculture
16:50 - 17:10	Coffee Break & Poster Session II

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Time	Event
17:10 - 18:35	Session 4: Chemical Priming and Modern Practices for Increased Crop Yields in Challenging Environments Chairs: Vassilis Fotopoulos & Jan Fila
17:10 - 17:30	George Manganaris (Cyprus University of Technology, Cyprus) The application of priming agents as a stress alleviation strategy to combat abiotic conditions in soft fruit crops
17:30 - 17:50	Maria Angeles Pedreno (University of Murcia, Spain) Plant cell culture-based biostimulants alleviate salinity stress in tomato seeds
17:50 - 18:10	Stefan Simm (Coburg University of Applied Sciences and Arts, Germany) Fertilizer optimization using XAI
18:10 - 18:30	Soofia Khanahmadi (Goethe University Frankfurt, Germany) Elucidating Pattern-Dependent Interactions, Immunomodulatory Roles, and Bioactivity Mechanisms of Chitooligosaccharides in Plants
18:30 - 18:35	Filipa Sousa (University of Porto, Portugal) Enhancing chestnut plants' climate resilience: a stress priming approach
20:15	Conference Dinner at NAVONA restaurant

Day 3: May 15, 2025	
Time	Event
09:00 - 13:30	Session 5: Breeding for Climate Resilience Crops Chairs: Aleksandra Radanovic & Ifigeneia Mellidou
09:00 - 09:40	Keynote Speaker: Avraham A. Levy (Weizmann Institute of Science, Israel) New breeding technologies and applications for vertical farming in tomato
09:40 - 10:00	Ueli Grossniklaus (University of Zurich, Switzerland) The Potential Contribution of Orphan Crops to a More Climate-Resilient Agriculture
10:00 - 10:20	Muriel Quinet (University of Louvain, Belgium) Exploring orphan crops and crop wild relatives to improve agricultural resilience to climate change
10:20 - 10:25	Jurica Duvnjak (Agricultural Institute Osijek, Croatia) Influence of light and increased temperatures on the photosynthetic parameters and grain yield of winter wheat varieties over two growing seasons
10:25 - 10:30	Salvatore Graci (University of Naples Federico II, Spain) Advancing Tomato Breeding for Heat Tolerance: Development of Resilient Hybrids for Climate Change Adaptation
10:30 - 10:35	Recep Irfan Nazli (University of Cukurova, Turkey) Evaluation of bioenergy and forage production potential of sweet sorghum (Sorghum bicolor L. Moench) inbred lines in a semi-arid Mediterranean environment
10:35 - 10:40	Rada Sucur (University of Novi Sad, Serbia) Evaluation of Resistance Genes in Wheat Cultivars Against Major Pathogens Under Abiotic Stress Conditions
10:40 - 11:30	Coffee Break – Poster Session II (continued)

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Time	Event
11:30 - 11:50	Ljiljana Kuzmanovic (University of Tuscia, Italy) Metabolomic profiling provides insights into pistil adaptation to heat stress in durum wheat lines carrying segmental introgressions from the wild grass Thinopyrum ponticum
11:50 - 12:10	Aleksandra Radanovic (National Institute of the Republic of Serbia, Serbia) Molecular Pathways to Resilience: A Dive into Sunflower Drought Tolerance
12:10 - 12:30	Faheem Shehzad Baloch (Mersin University, Turkey) Image Analysis-Driven High-Throughput Phenotyping and Genome-Wide Association Studies for Mapping some Agronomic Traits in Buckwheat
12:30 - 12:50	Carlos Gu (Novogene) Harnessing Sequencing and Multi-Omics to Empower Climate-Proof Crop Innovation: From Lab Insights to Farm Resilience
12:50 - 14:00	Lunch Break
14:00 - 15:00	Special RECROP section: Stakeholders meet Researchers Stella Provelengiou (Wikifarmer, Greece)
15:00 - 16:00	Young Researchers – Round Table Discussion Olha Lakhneko (Institute of Botany, Slovak Academy of Sciences, Slovakia)
16:00 - 17:00	Closing Remarks

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