

"HARNESSTOM alliance with Roxy-COST action"

The Roxy-COST Action "Oxygen sensing a novel mean for biology and technology of fruit quality" annual meeting took place in Belgrade from 4-6 October 2022 (https://roxycost.toulouse-inp.eu/en/index.html)(https://www.cost.eu/actions/CA18210/). The meeting gathered 70 participants from 23 different countries from all over Europe. An excellent opportunity for networking and interaction with the community of researchers interested in tomato ripening, postharvest and plant responses to stress under the common theme of low oxygen participation in those processes. The meeting was a great success given the quality of the scientific presentations and the ideas that emerge during the brainstorming on different sessions/wps.

HARNESSTOM was highly represented in the meeting as the institution coordinating Roxy-COST (INPT) is also a partner of HARNESSTOM and HARNESSTOM coordinator is a member of the Management Committee and the Core group of Roxy-COST Action.

As result of this cross-pollination event, Roxy-COST partners agree to collaborate with HARNESSTOM's in several networking and training activities programmed for the coming months. These include (1) the upcoming Training School on "Finding your ideal Tomato", scheduled for December 2022 and organized by ENEA partner in Rome; (2) the "Phenotyping Training Course and phenotyping Jamboree" (March 2023, organized by UPC, UNITUS and MVCRI to take place at MVCRI in Bulgaria) and (3) the "Second Advanced training School" to take place on Oct 2023 in Israel. In addition to collaboration and co-organization of these training schools, Roxy-COST will allocate STSMs to facilitate participation of Roxy-COST students. HARNESSTOM also will facilitate including data from Roxy-COST partners in the one-stop-shop HARNESSTOM Database and provide access to the HARNESSTOM Gateway of genomic, genetics and phenotypic information and tools.



News for this upcoming event will be advertised and communicated at due time

Figure 1. Roxy COST - HARNESSTOM alliance logo







Figure 2. Group Picture of the participants at the ROXY COST meeting in Belgrade

PROGRAM

DAY1 – TUESDAY 4th OCTOBER

9:00-9:30	Registration					
	Welcome and Introduction to the COST Action CA18210					
9:30-10:00	J. Pirrello / P. Kalaitzis / D.Misic					
-	Chair: Danijela Misic					
40-00 40-50	Angelos Kanellis					
10:00-10:50	Low Oxygen Action on Fruit Tissues: A Renaissance of the First Scientific Love - How it					
	Was Started and How it Was Progressed					
10:50-11:20	Coffee Break					
11:20-11:40	Julien Pirrello					
	Transition to ripening in tomato fruit needs genetic reprogramming initiated in gel tissue					
11:40 -	Panagiotis Kalaitzis					
12:00	Alterations in the expression of prolyl 4 hydroxylase 3 induces significant changes in tomato					
	fruit ripening					
12:00 -						
13:30 Lunch						
	ECI session					
13:30 - 13:40	ECI introduction – B. Van de Poel / M. Vidovic / S. Hartman					
13:40 –	Jasmina Nikodinovic					
14:00	Reducing the carbon footprint of a research scientist					
14:00 -	Anton Shiriaev					
14:15	The Impact of selenium enrichment on tomato fruit metabolome and transcriptional					
	regulation					
14:15 –	Nurdan TUNA GÜNES					
14:30	The Effects of Low Oxygen Applications and Different Storage Conditions on the					
	Sensory Properties of 'Santa Maria' and 'Ankara' Pear Cultivars					
14:30 -	Maria Lobato Gomez					
14:45	Metabolic engineering to improve tomato fruit quality Oliver Tusevski					
44.45 45.00						
14:45 - 15:00	Phenolic compounds contents and antioxidant activity of apples stored in a controlled					
	atmosphere Veigl					
15:00 – 15:15	Impact of 1-MCP treatment and low oxygen storage conditions on post-harvest ethylene					
	production depends on the apple cultivar					
	Shiyu Ying					
15:15-15:30	Regulation and role of ERF.E in climacteric fruit ripening					
15:30 -						
16:00	Coffee break					
	Ntoanidou Symela					
16:00 -	Transcriptome analysis and functional characterization of genes involved in the					
16:15	phenolic diterpenoids' biosynthetic pathway in Rosmarinus officinalis					





16:15 - 16:30	Sonja Rašeta Influence of flooding on growth performance of selected tomato genotypes from Gene Bank of Republic of Srpska
16:30 -	Panel discussion with junior PI's at different stages of their academic career and
18:00	the ECI members Coffee break

DAY2 – WEDNESDAY, 5TH OCTOBER

	Chair: Mondher Bouzayen				
9:30-9:50	Miloš Mojović				
	Employing EPR spectroscopy and imaging to expose oxidative stress in plants				
9:50 – 10:10	D. Gibbs				
	Hypoxia signalling via functionally distinct plant N-degron pathway targets				
	Sjon Hartman				
10:10-10:30	Remember the Rain: VRN2 Encodes Hypoxia Memory to Enhance Long-Term Flooding				
	Tolerance				
10:30-11:00	Coffee Break				
11:00-11:20	Tony Granell				
	Tomato antioxidant composition in the fruit: natural and generated diversity				
	Gianfranco Diretto				
11:20 -11:40	Genome editing-induced remodeling of allergen and glycoalkaloid composition in				
	tomato				
11:40 –	Paul Fraser				
12:00	Isoprenoid biosynthesis and sequestration in tomato fruit and the role of plastoglobuli				
12:00 -	Lunch				
13:30					
	Chair: Panagiotis Kalaitzis				
13:30-13:50	B. Van de Poel				
10.00-10.00	Leaf ontogeny and epinasty: how development steers morphological plasticity during				
	waterlogging stress in tomato'				
	Mustafa Erkan				
13:50-14:10	The Effect of Low Oxygen Storage vs 1-Methylcyclopropene in Different Tomato Types				
	and Cultivars During Ripening				
14:10 –	B. Nicolaï				
14:30	Oxygen transport and hypoxia in tomato fruit during development				
14:30 -	Danijela Misic				
14:50	Berries of hypoxia-tolerant Solanum dulcamara L.: a convenient model system to study				
14.50	redox processes in relation to fruit ripening				
14:50 - 15:	Agata Leszczuk				
10	Arabinogalactan protein is a molecular and cytological marker of the fruit ripening				
	process				
15:10 -	Coffee break				
15:40					
15:40-16:00	Beatriz BIELSA PEREZ				
	Biomarkers for oxygen sensing and waterlogging in Prunus rootstock				
16:00-16:20	Aylin ALTAN				
	Development of moisture resistant visual oxygen indicator in packaged fruits				
16:20 -	Margarida Ana Fortes				
16:40	SIGRAS10 mutants exhibit lower seed number and subtle delay in fruit ripening				
20:00	Gala diner				
	Restaurant "Dva jelena" in the bohemian quarter "Skadarlija"				





DAY3 - THURSDAY 6TH OCTOBER

09:30-11:00	Working Group parallel sessions				
	Working Group Hormonal profiling	Working Group Post-harvest challenge	Working Group Low oxygen and ROS in plant physiology		
11:00 – 11:30	Coffee break				
11:30-12:00	Working Group restitution and general discussion				
12:00-13:30	Lunch				
13:30-16:00	Meeting of the Management Committee CA18210 – only for MC members				
18:00	Celebration of jubilee "50 years of Serbian Plant Physiology Society" in Botanical garden "Jevremovac"				

