

**RoxyCOST Annual Meeting**  
**6 March, 2024 – 8 March, 2024**  
**NH Collection Gran Hotel de Zaragoza**  
C. Joaquín Costa, 5, Casco Antiguo, 50001 Zaragoza, Espagne

**DAY1 – March 6**

<b>9:00-9:30</b>	<b>Registration</b>
<b>9:30-09:40</b>	<b>Welcome and Introduction to the final RoxyCOST meeting - COST Action CA18210</b> J. Pirrello / P. Kalaitzis / M.J Rubio Cabetas
	<b>Chair: Bram van de Poel &amp; Danijela Mistic</b>
<b>09:40-10:00</b>	<b>Antonio Grannel</b> The legislative proposal on NGTs and its applications to (horticultural) crops
<b>10:00-10:20</b>	<b>Panagiotis Kalaitzis</b> Suppression and overexpression of tomato P4H3 results in alteration in fruit ripening programme
<b>10:20-10:40</b>	<b>Angelos Kanellis</b> Functional characterization of biosynthetic pathway of antidiabetic triterpenes in Pistachia lentiscus var. Chia
<b>10:40 – 11:00</b>	<b>Niels Eerdekens</b> Unraveling the role of cytokinins in waterlogging stress and leaf epinasty of tomato
<b>11:00-11:40</b>	<b>Coffee break</b>
	<b>Chair : Bram van de Poel &amp; Danijela Mistic</b>
<b>11:40 - 12:00</b>	<b>Paul Fraser</b> Biochemical characterisation of tomato plants with modulated levels of APRR2-like gene
<b>12:00 – 12:20</b>	<b>Gianfranco Diretto</b> Metabolomics and Proteomics remodelling in edited tomato lines in allergen and glycoalkaloid pathways.
<b>12:20 – 12:40</b>	<b>Clara Pons</b> HarnesstomDB a multi-omics genetic diversity resource database
<b>12:40 – 14:00</b>	<b>Lunch</b>
	<b>Chair: Mondher Bouzayen &amp; Marija Vidovic</b>
<b>14:00 – 14:20</b>	<b>Michael Holdsworth</b> Discovering novel components and mechanisms of oxygen sensing in Arabidopsis thaliana
<b>14:20 – 14:40</b>	<b>Bram van de Poel</b> How does low-oxygen stress direct ethylene production
<b>14:40 – 15:00</b>	<b>Francesco Licausi</b> Evolution of the transcriptional response to hypoxia in land plants
<b>15:00 - 15:20</b>	<b>Daan Weits</b> Enigma of the hypoxic niche: the role of oxygen sensing in meristematic tissues
<b>15:20 - 15:40</b>	<b>Dan Gibbs</b> Epigenetic control of plant development and stress responses through functionally distinct substrates of the oxygen-sensing N-degron pathway
<b>15:40 - 16:20</b>	<b>Coffee break</b>
	<b>Chair: Mondher Bouzayen &amp; Marija Vidovic</b>
<b>16:20 – 16:40</b>	<b>Mustafa Erkan</b> Low O2 atmosphere storage technologies
<b>16:40 - 17:00</b>	<b>Adem Dogan</b> Effects of Different Oxygen Levels on Postharvest Quality of Fresh Fig Fruit
<b>17:00-17:20</b>	<b>Víctor Baquero-Aznar</b> Strategies for increasing the oxygen and water barrier properties of egg white protein films

**DAY2 – March 7**

	<b>Chair : Julien Pirrello &amp; Dominique van der Straeten</b>
<b>09:40-10:00</b>	<b>Justyna Boniecka</b> CRISPR/Cas9-directed editing of RelA/SpoT homologs in tomato ( <i>Solanum lycopersicum</i> L.)
<b>10:00-10:20</b>	<b>Maria Lobato Gomez</b> Unraveling the changes in carotenoid metabolism in Tomaffron and its improved derivatives
<b>10:20-10:40</b>	<b>Dorotea Ricci</b> Physiological and metabolic effects of $\beta$ -apo-11-carotenal and Zaxinone apocarotenoids in tomato
<b>10:40 – 11:00</b>	<b>Sonja Umicevic</b> Antioxidative response of tomato under repeated flooding treatment
<b>11:00-11:40</b>	<b>Coffee break</b>
	<b>Chair : Julien Pirrello &amp; Dominique van der Straeten</b>
<b>11:40 - 12:00</b>	<b>Jose Antonio Gonzalez Aguilar</b> Understanding GjCCD4a for its use in tomato fruits to produce higher quantities in saffron apocarotenoids in tomato and eventually affect oxygen-related responses in the fruit
<b>12:00 – 12:20</b>	<b>Eleonora Fabene</b> Molecular and functional characterization of tomato candidate genes involved in the biosynthesis of the apocarotenoid zaxinone
<b>12:20 – 12:40</b>	<b>Hayri Üstün</b> Cell wall-related gene expression in tomato proceeds in the absence of ethylene under hypoxic conditions
<b>12:40 – 13:00</b>	<b>Selman Uluşık</b> Ripening Related Candidate Genes are revealed in Tomato by Transcriptome Profiling Under low O <sub>2</sub> Storage
<b>13:00 - 14:20</b>	<b>Lunch</b>
	<b>Chair : Panagiotis Kalaitzis &amp; Maria Rubio Cabetas</b>
<b>14:20 – 14:40</b>	<b>Dominique van der Straeten</b> The molecular core of transcriptome responses to abiotic stress & the role of ethylene therein
<b>14:40 – 15:00</b>	<b>Millenaar Frank</b> Breeding for tomato fruit quality
<b>15:00 – 15:20</b>	<b>Biljana Kukavica</b> Characterization of non-enzymatic antioxidant metabolism in the leaves of <i>Carex acuta</i> L. (Cyperaceae) under different water regimes of the habitat
<b>15:20 - 15:40</b>	<b>Stefano Brizzolara</b> Innovative Controlled Atmosphere (CA) protocol for new <i>Actinidia chinensis</i> varieties
<b>15:40 - 16:00</b>	<b>Jaime González-Buesa</b> Advances in mathematical modeling of the gas composition in microperforated modified atmosphere packages for the storage of fresh produce
<b>16:00 - 16:40</b>	<b>Coffee break</b>
	<b>Chair Panagiotis Kalaitzis &amp; Maria Rubio Cabetas</b>
<b>16:40 – 17:00</b>	<b>Bart Nicolai</b> Hypoxia and poromorphogenesis in developing pome fruit
<b>17:00-17:20</b>	<b>Sonia Osorio</b> Can OMICs data help to better understand the impact of environmental factors on berry fruit quality
<b>17:20-17:40</b>	<b>Marija Vidovic</b> Flooding and antioxidative response in wheat
<b>21:00</b>	<b>Gala Dinner</b> RESTAURANT TRES MARES

**DAY3 – March 8**

<b>9:30 – 11:00</b>	<b>Working Group</b> Data management and dissemination	<b>Working Group</b> Data integration and systems analysis of role of hypoxia and ROS signalling	<b>Working Group</b> Post-harvest challenge	<b>Working Group</b> Impact of low oxygen, ROS and NO on fruit productivity and quality
<b>11:00 - 11:30</b>	<b>Working Group restitution and general discussion</b>			
<b>11:30 – 12:00</b>	<b>Coffee break</b>			
<b>12:00 – 13:00</b>	<b>Meeting of the Management Committee CA18210 – only for MC members</b>			