



10<sup>th</sup> International Symposium

# Plant Senescence

Pisa 17-19 July 2024

**Venue – Aula Magna – Sant’Anna School of Advanced Studies**  
Piazza Martiri della Libertà, 33 Pisa

## Day 1 – Wednesday, July 17

**09:00 - 10:30 Registration – Welcome Coffee**

**10:30 Welcome to Participants**

- Rector of Sant’Anna School of Advanced Studies, **Prof. Sabina NUTI**
- Director of Institute of Crop Science of Sant’Anna School of Advanced Studies, **Prof. Pietro TONUTTI**
- Convener, **Prof. Antonio FERRANTE**

### *Scientific Session*

## **Molecular mechanisms involved in the senescence regulation**

**Chairperson: Prof. Luca Sebastiani**

Institute of Crop Science of Sant’Anna School of Advanced Studies, Italy

- 11:00 – 11:40 **Keynote Speaker.** From leaf senescence to crop resilience. **Susheng Gan**, Cornell University, USA
- 11:40 – 12:10 Oral. The ubiquitin E3 ligase UPL5 controls cold-induced leaf senescence in Arabidopsis. **Ying Miao** - Fujian Agriculture and Forestry University, China
- 12:10 – 12:40 Oral. The WRKY25 can act as redox switch to drive the expression of WRKY53 during leaf senescence in *Arabidopsis thaliana*. **Ana Andrade** - University of Tübingen, Germany
- 12:40 – 12:50 Short Oral. Assessing salt tolerance through senescence markers in *Solanum lycopersicum* and *Solanum pimpinellifolium*. **Susanna Cialli** - Sant’Anna School of Advanced Studies, Italy
- 12:50 – 13:00 Short Oral. NtMYB1 and NtNCED1/2 control abscisic acid biosynthesis and tepal senescence in Chinese narcissus (*Narcissus tazetta*) **Ying Miao** - Fujian Agriculture and Forestry University, China

**13:00 – 14:30 Light Lunch**

## *Scientific Session*

### **Molecular mechanisms involved in the senescence regulation**

**Chairperson: Prof. Hilary Rogers**

Cardiff University, UK

14:30 – 15:10 **Keynote Speaker.** Small peptides in plant senescence: big pictures to be unveiled. **Yongfeng Guo** - Tobacco Research Institute of Chinese Academy of Agricultural Sciences, China

15:10 – 15:40 Oral. Molecular regulation and hormonal signaling for heat-induced leaf senescence in perennial grass species. **Bingru Huang** - Rutgers University, USA

*15:40 – 16:00 Coffee break*

## *Scientific Session*

### **Metabolic and biochemical changes under senescence**

**Chairperson: Prof. Yongfeng Guo**

Tobacco Research Institute of Chinese Academy of Agricultural Sciences, China

16:00 – 16:40 **Keynote Speaker.** Decoding the intricate metabolic and biochemical changes in plant senescence. **Petronia Carillo** - University of Campania, Italy

16:40 – 17:10 Oral. Whole plant resource integration and function during flooding induced senescence. **Hans van Veen** - Groningen Institute of Evolutionary Life Science, Faculty of Science and Engineering, University of Groningen, the Netherlands

17:10 – 17:40 Oral. Postharvest metabolic changes in *Brassica rapa* L. subsp. *sylvestris*. **Giovanna Marta Fusco** - University of Campania, Italy

*17:45 Group Photo*

**18:00 - Guided Tour on the Walls of Pisa**

---

## **Day 2 – Thursday, July 18**

## *Scientific Session*

### **Natural and induced postharvest senescence**

**Chairperson: Prof. Giancarlo Colelli**

University of Foggia, Italy

09:30 – 10:10 **Keynote Speaker.** Omics and epigenetics of plant organ senescence post-harvest. **Hilary Rogers** - Cardiff University, UK

10:10 – 10:30 Oral. The dark side of leaf senescence. **Antonio Ferrante** - Institute of Crop Science of Sant'Anna School of Advanced Studies, Italy

10:30 – 10:40 Short Oral. Understanding senescence delay of colour and firmness traits in CO<sub>2</sub>-treated strawberries through transcriptomics. **Carmen Merodio** - Institute of Food Science, Technology and Nutrition (ICTAN-CSIC), Madrid, Spain

*10:40-11:00 Coffee break*

### *Scientific Session*

#### **Natural and induced postharvest senescence**

**Chairperson: Prof. Sergi Munné-Bosch**

University of Barcelona, Spain

- 11:00 – 11:30 Oral. Computer vision system for non-destructive and contactless evaluation of quality traits in fresh rocket leaves (*Diplotaxis tenuifolia* L.). **Giancarlo Colelli** - University of Foggia, Italy
- 11:30 – 11:40 Short Oral. RIPLESS: a natural solution to improve the shelf life of stone fruits. **Tania Mesa** - University of Barcelona, Spain
- 11:40 – 11:50 Short Oral. Tissue-differential response to long-term postharvest cold storage and short-term high CO<sub>2</sub> treatments in table grape. **María Isabel Escribano** - Department of Characterization, Quality and Security, Institute of Food Science, Technology and Nutrition (ICTAN-CSIC), Madrid, Spain
- 11:50 – 12:00 Short Oral. Oxidative pinking discolouration in *Lactuca sativa* across leaf parts and lettuce types. **Muhamad Hazwan Yahya** – University of Reading, UK

### *Sponsors Session*

12:00 – 12:30 **Paul Davis, Hansatech, UK - Sponsor**

12:30 – 13:00 **Chen Junchi, Salus Biomed - Sponsor**

**13:00 – 14:30 Light Lunch**

### *Scientific Session*

#### **Biotic and Abiotic stresses in the senescence regulation**

**Chairperson: Prof. Petronia Carillo**

University of Campania, Italy

- 14:30 – 15:10 **Keynote Speaker.** Drought stress-induced leaf senescence in plants: how to detect it and why. **Sergi Munné-Bosch** - University of Barcelona, Spain
- 15:10 – 15:40 Oral. Non-destructive analyses of *Populus alba* L. provide a valuable indicator of the status of leaves senescence under salt stress. **Chayma Assabbane** - Sant'Anna School of Advanced Studies, Italy
- 15:40 – 16:10 Oral. Stress as the mold of ageing mechanisms in mountain pines. **Ot Pasques** - University of Barcelona, Spain

**16:10-16:30 Coffee break**

### *Scientific Session*

#### **Biotic and Abiotic stresses in the senescence regulation**

**Chairperson: Prof. Anna Mensuali**

Institute of Crop Science of Sant'Anna School of Advanced Studies, Italy

- 16:30 – 16:40 Short Oral. Anthocyanin-mediated resistance and senescence modulation in potatoes against *Rhizoctonia solani*: insights from two contrasting varieties. **Vincenzo D'Amelia** - University of Naples, Federico II, Italy

16:40 – 16:50 Short Oral. Plant senescence in tissue-cultured ornamental plants. **Annalisa Meucci** - Sant'Anna School of Advanced Studies, Italy

*Free time for visiting Pisa*

**20:00 Gala Dinner** – Aula Magna Storica

---

## **Day 3 – Friday, July 19**

### *Scientific Session*

#### **Natural and induced postharvest senescence**

**Chairperson: Prof. Anastasios Darras**

University of Peloponnese, Greece

09:00 – 09:40 **Keynote Speaker.** The UK Food Aid sector – where postharvest senescence becomes a huge problem. **Carol Wagstaff** - University of Reading, UK

09:40 – 10:10 Oral. Fluorescent light with a background of sunlight delays yellow tomato postharvest senescence by a re-accumulation of chlorophylls. **Tania Mesa** - University of Barcelona, Spain

10:10 – 10:40 Oral. Study the Mechanisms of Ethylene Action during Postharvest Senescence in Broccoli. **Tie Liu** - University of Florida, Gainesville, Florida, USA

10:40 – 10:50 Short Oral. Exogenous postharvest application of abscisic acid: effect on quality in tomato fruit senescence. **Giulia Franzoni** - University of Milan, Italy

*10.50 - 11:10 Coffee break*

### *Scientific Session*

#### **Autophagy, cell death, and senescence**

**Chairperson: Dr. Alessandra Francini**

Institute of Crop Science of Sant'Anna School of Advanced Studies, Italy

11:10 - 11:40 Oral. Throwing away to survive senescence of rhizome as a mechanism adopted by clonal plants to remain young forever. **Gabriela Santos da Silva** - Institute of Botany of the Czech Academy of Sciences, Czech Republic

11:40 - 11:50 Short Oral. Cathepsin B cleaves BiP during ER-stress induced PCD. **Marianna Coppola** - University of Manchester, United Kingdom

11:50 – 12:10 Master in Floriculture **Anastasios Darras**, University of Peloponnese, Greece

12:10 – 12:20 Presentation of the next **11<sup>th</sup> International Symposium on Plant Senescence**. **Yongfeng Guo** - Tobacco Research Institute of Chinese Academy of Agricultural Sciences, China

12:20 – 12:35 Awards – Best Oral and Short Oral Presentation

**12:35 – Closing Ceremony**

*13:00 – 14:30 Light Lunch*

**15:00 – 19:30 Tour – Visit to Winery La Regola**

## SPONSORS

ANNALS OF  
**BOTANY**  
Nonprofit since 1887

[Annals of Botany | Oxford Academic \(oup.com\)](https://www.oup.com/annals-of-botany/)

**Salus** 赛陆医疗  
innovation in biomed

[www.salus-bio.com](http://www.salus-bio.com)

*Hansatech*  
Instruments

<https://www.hansatech-instruments.com/>

**npj** | science of plants <https://www.nature.com/npjsciplants/>