

7th European Workshop on Plant Senescence

Monday, November 10th, 2014

- 13:00 Registration opens
- 17:15 – 17:30 Opening remarks
Per L. Gregersen
- 17:30 – 18:15 *Plenary keynote:*
Peter J. Davies, Cornell
Senescence of the Whole Plant: A Look Back and a Look Forward
- 18:30 – 20:00 **Dinner**
- 20:00 – 20:30 Karin Krupinska & Colette Matthewman
Presentation of the MC - Initial Training Network 'CropLife'
'Enhanced Plant Productivity through Control of Lifespan'
- 20:00 – Informal get-together in the Mansion house
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Tuesday, November 11th, 2014

Session 1: Plant Senescence and Stress

Chair: Shimon Gepstein

- 08:30 – 09:15 *Stay-green and drought:*
Andrew Borrell
The stay-green trait in cereals: integrating from cell to whole plant
- 09:15 – 09.35 Avishai Avni
Releasing the brakes: Cytokinins reduce stress-related inhibitory processes
- 09:35 – 09:55 Zofia Szweykowska-Kulinska
Heat stress responsive microRNAs inhibit tillering
- 09:55 – 10:25 **Coffee Break**

10:25 – 10:55	Salma Balazadeh NAC transcription factor RAF mediates ABA induced leaf senescence in <i>Arabidopsis thaliana</i>
10:55 – 11:25	Isabel Diaz Protein degradation/mobilization events involved in leaf senescence mediated by biotic/abiotic stresses
11:25 – 11:40	Benjamin Gourion Nodule senescence, defense suppression, genetic and environmental factors
11:40 – 11:55	Christoph Brütting Cytokinin-mediated regulation of plant development controls herbivore resistance in <i>Nicotiana attenuata</i>
12:00 – 14:00	Lunch

Session 2: Whole Plant Senescence and Flowering Time

Chair: Mats Hansson

14:00 – 14:30	Su-Sheng Gan A novel mechanism controlling whole plant senescence in the monocarpic <i>Arabidopsis</i> plants
14:30 – 14:45	Izabela Matyszczyk Genetic elucidation of <i>Mat-b</i> and <i>Mat-c</i> , two hypothetically co-localized genes determining maturity time in barley

Session 3: Organ Senescence: Flowers

Chair: Mats Hansson

14:45 – 15:30	Hilary Rogers Destined to die: regulation of floral senescence
15:30 – 15:50	Moritz K. Nowack Age-induced programmed cell death limiting the functional life span of the floral stigma

15:50 – 16:20 **Coffee**
16:20 – 18:00 Poster session 1
18:30 – 20:00 **Dinner**

Wednesday, November 12th, 2014

Session 4: Nutrient Remobilization and Senescence
Chair: Karin Krupinska

08:30 – 09:00 Céline Masclaux-Daubresse
Autophagy machinery controls nitrogen remobilization to the seeds

09:00 – 09:15 Liliana Avila Ospina
Autophagy, senescence and nitrogen remobilization in barley

09:15 – 09:35 Thomas Roitsch
Relation between metabolic control of leaf senescence by carbohydrates and nitrogen metabolism

09:35 – 09:55 Fabien Chardon
Deciphering interaction between leaf senescence and grain filling using natural variation in *Arabidopsis thaliana*

09:55 – 10:05 Group photo

10:05 – 10:35 **Coffee**

10:35 – 10:50 Julien Hollmann
The senescence associated barley cysteine peptidase HvPAP14 – from the endoplasmic reticulum to the chloroplast

10:50 – 11:05 Stefan Kohl
Barley glumes: a transitory buffer of resources during endosperm filling

11:05 – 11:20 Stefan Bieker
H₂O₂ is involved in leaf senescence induction under N sufficient but not N starvation conditions

11:20 – 11:40	Andrzej Pacak Identification of barley PHO2 gene expression regulators
11:40 – 12:00	Moshe Sagi Impairment in sulfite conversion may lead to leaf senescence in plants
12:00 – 13:30	Lunch
13:30 – 16:30	Social excursion to “Dybbøl Banke Historical Centre”
16:30 – 16:50	Coffee
16:50 – 18:30	Poster session 2
18:30 –	Dinner
Social event:	
20:00 – 20:45	Colette Matthewman Tales from a sailing trip to the Antarctic 2013-14.

Thursday, November 13th, 2014

Session 5: The Photosynthetic Apparatus during Leaf Senescence

Chair: Kazimierz Strzalka

08:30 – 09:00	Stefan Hörtensteiner Catabolite modification during chlorophyll breakdown in senescing plants
09:00 – 09:15	Aditi Das Investigating the chlorophyll breakdown pathway in barley
09:15 – 09:30	Ivan Jajic Oxidative stress and changes in thylakoid membrane fluidity during barley leaf senescence
09:30 – 10:00	Anja Krieger-Liszkay Biophysical methods for detecting alterations in photosynthetic electron transport and ROS production during senescence

10:00 – 10:15 Justine Bresson
Quantifying the dynamics of spatial heterogeneity of whole-plant photosynthetic efficiency with the analysis of chlorophyll fluorescence

10:15 – 10:45 **Coffee**

Session 6: Postharvest Physiology and Senescence

Chair: Hilary Rogers

10:45 – 11:30 Leon Terry
(Post harvest keynote - TBA)

11:30 – 11:45 Antonio Ferrante
Relationship between senescence and quality of fruits and vegetables

11:45 – 12:00 Luke Bell
Volatile organic compounds of rocket salad (*Eruca sativa*) post-harvest and implications for human sensory perceptions

12:00 – 14:00 **Lunch**

Session 7: Regulation of Senescence I

Chair: Stefan Jansson

14:00 – 14:45 Hong Gil Nam
Systems Biology of Plant Senescence and Death: How do plants know when to die and how to die?

14:45 – 15:15 Yongfeng Guo
Profiling the metabolome of leaf senescence in tobacco

15:15 – 15:35 Hannele Tuominen
Regulation of cellular senescence processes by a cascade of hydrolytic enzymes

15:35 – 16:05 **Coffee**

16:05 – 16:20 Andrea Culetic
Expression of senescence associated genes in ryegrass

16:20 – 16:40	Yasuhito Sakuraba Light regulation of plant senescence: The phytochrome-interacting transcription factors PIF4 and PIF5 induce leaf senescence in <i>Arabidopsis</i> <i>Hormone regulation</i>
16:40 – 17:00	Bjarke Veierskov Effects of zeatin, N ⁷ and N ⁹ glycosylated cytokinins on senescence and hormonal balance in oat leaf segments
17:00 – 17:15	Erik Olofsson Profiling cytokinins during autumn leaf senescence in aspen (<i>Populus tremula</i>)
17:15 – 17:30	Sara Shahnejat-Bushehri JUB1, a central regulator of plant growth and development under stress conditions
17:30 – 18:00	Discussions on the future of the workshop series
19:00 –	Conference dinner

Friday, November 14th, 2014

Session 8: Regulation of Senescence II
Chair: Vicky Buchanan-Wollaston

08:30 – 09:00	Amnon Lers Analysis of miRNAs Associated with Plant Senescence and Abiotic Stress Responses
09:00 – 09:30	Pyung Ok Lim The <i>Arabidopsis</i> leaf developmental transcriptome: Multi-dimensionally coordinated shifts of transcriptional programs along the whole life span of leaf
09:30 – 09:45	Paula Paramon Whirly1 and epigenetic control of drought-stress induced senescence

09:45 – 10:00	Gloria Comadira The single-stranded DNA-binding protein WHIRLY1 regulates chloroplast composition, functions and chloroplast to nucleus signaling in barley (<i>Hordeum vulgare</i>)
10:00 – 10:30	Coffee
10:30 – 10:50	Klaus Humbeck Senescence-specific histone modifications and DNA methylation at the senescence-associated gene <i>HvS40</i> in barley

Session 9: Senescence, Productivity and Plant Breeding

Chair: Helen Ougham

10:50 – 11:20	Carol Wagstaff A statistical crop model to predict and explain resource partitioning in oilseed rape and its relationship with senescence and yield
11:20 – 11:35	Peter Muth Phenotypic diversity and genome-wide association mapping of senescence traits in a diverse ecotype collection of perennial ryegrass
11:35 – 12:00	Poster awards Concluding remarks
12:00 –	Lunch Departure