

# EUCARPIA

LEAFY VEGETABLES 2015

14-17 April 2015,  
San Pedro del Pinatar  
(Murcia, Spain)

## Programme

With thanks to our sponsors:



TOZER SEEDS

## Programme of Events

### *Tuesday 14 April*

11.00 Registration Desk opens

13.00 Welcome lunch on pool terrace

**14.15 Welcome address from:**

**The organisers: Carol Wagstaff and Maria Isabel Gil**

**EUCARPIA: Jaime Prohens.**

### **S1 Preharvest abiotic stress**

**Chair: Giancarlo Colelli (University of Foggia, Italy)**

14.30 Francisco Tomás-Barberán (CEBAS-CSIC, Spain)

*Plant metabolomics: a useful tool for the analysis of phytochemicals*

15.15 Rafael Chan-Navarrete (Wageningen University and Research Centre, NL)

*Development of a dedicated breeding strategy for nitrogen-use efficiency in spinach*

15.45 Farzaneh Bekhradi (University of Tehran)

*Effects of water stress and salinity on the quality of different genotypes of basil*

16.00 Tea

**16.30 Poster session #1**

**Chair: Maria Isabel Gil (CEBAS-CSIC, Spain)**

**To include mini-presentations (3 slides, 5 minutes) from the following poster presenters:**

PS1.1 Andrew Beacham (Harper Adams University, UK). Developing methods to assess and quantify abiotic stress response in *Brassica oleracea* and *Lactuca sativa*

PS1.2 Andrea Hinojosa (Universidad de Chile). Effect of UV-B light applied on pigmented lettuce cultivar to increase functional compounds

PS1.3 Dionysios Touliatos (Lancaster University, UK). A role for oxidative stress in mediating tipburn of lettuce?

PS1.4 Muhammad Ashfaq (University of the Punjab, Pakistan). Characterization of *Pseudomonas* species associated with tomato wilt disease

PS1.5 Nadia Yahya (University of Reading, UK). Microbiological quality of rocket salad in supply chain context

PS1.6 Yolanda Garrido (CEBAS-CSIC, Spain). Is the light exposure the only factor promoting an abiotic stress during postharvest storage of baby spinach?

PS1.7 Giancarlo Colelli (University of Foggia, Italy). Chemical, physical and sensorial characterization of fresh quinoa sprouts (*Chenopodium quinoa* Willd.) and effects of modified atmosphere packaging.

## **18.00 END OF SESSION**

19.30 Drinks reception

20.30 Dinner in main dining hall

## **Wednesday 15 April**

### **S2 Biotic stress: from plants to people**

**Chair: Paul Hand (Harper Adams University)**

09.00 Richard Michelmore (UC Davis, USA)  
*Comparative genomics of lettuce and *Bremia lactucae* to inform strategies for more durable disease resistance*

09.45 Gemma Hough (ADAS, UK)  
*Screening for host-plant resistance against Nr:0 and Nr:1 biotypes of *Nasonovia ribisnigri**

10.15 Coffee

10.45 Ryan Hayes (USDA, USA)  
*Breeding and genetics of bacterial leaf spot resistance*

11.30 German V. Sandoya (USDA, USA)  
*Breeding and genetics of lettuce against *Verticillium* Wilt Race 2*

12.00 Ilya Raskin (Rutgers University, USA)  
*Is gut microbiota a missing link for understanding bioactivity of dietary polyphenols?*

### **S3 Improving structural and functional crop quality**

**Chair: Marita Cantwell (UC Davis, USA)**

12.30 Hilary Rogers (Cardiff University, UK)  
*Tracking quality changes through the supply chain for leafy vegetables using multi-trait analyses*

13.00 Giancarlo Colelli (University of Foggia, Italy)  
*Application of multivariate accelerated test for the estimation of shelf life of fresh-cut lettuce.*

13.30 Lunch on pool terrace

14:45 Natasha D Spadafora (Cardiff University, UK)  
*Application of thermal desorption gas chromatography time-of-flight mass spectrometry (TD-GC-TOF-MS) as a tool for analysis of fresh cut produce quality*

15.00 Carol Wagstaff (University of Reading, UK)  
*Using the L. sativa x L. serriola lettuce mapping population to direct breeding for flavour and nutrition*

15.30 Tea

## **Special session: industry-led problem solving**

16.00 Parallel break out sessions led by industry reps:  
***What does industry need from academia and vice versa?***

***Roundtable 1: Managing pests and pathogens throughout the supply chain***  
**Chair:** Carol Wagstaff (University of Reading, UK)  
***Led by: Sue Kennedy (Elsoms Seeds), Antonio Marhuenda (Primaflor), Miguel Aranda (AbioPep)***

***Roundtable 2: Managing quality throughout the supply chain***  
**Chair:** Jim Monaghan (Harper Adams University)  
***Led by: Laura Pierce (TBC; Monsanto), Laura Jackson (R&G Herbs), Jose Maria Garrido (Garrido Fresh Mentoring)***

17.00 ***Reporting back from breakout sessions and definition of next steps***  
**Chair:** Carol Wagstaff (University of Reading, UK)

17.30 **Poster session #2**  
**Chair:** Maria Isabel Gil (CEBAS-CSIC, Spain)

**To include mini-presentations (3 slides, 5 minutes) from the following poster presenters:**

PS2.1 Juan Antonio Tudela (CEBAS-CSIC, Spain). Freshness of fresh-cut lettuce: from the field to the consumers.

PS2.2 Carlos García Hernández- Gil (CEBAS-CSIC, Spain). Metabolomics to evaluate the browning potential of Iceberg lettuce.

PS2.3 Rosa Oria (University of Zaragoza, Spain). Comparison of overall sensory profile of raw, fresh-cut and sous-vide borage (*Borago officinalis*) by means of a sorting task strategy.

PS2.4 Sara Remon (Aula Dei Scientific and Technological Park, Spain). Optimization of processing of fresh-cut endive.

PS2.5 Michail Tsiunel (Research Institute of Greenhouse Vegetable Production, Russia). Creation of new forms of dill by means of intervarietal hybridization.

PS2.6 Salvador Soler (Institute for Conservation and Improvement of Valencian Agrodiversity, Spain). Screening of wild *Lactuca* materials against infection of a *Bremia lactucae* race from Murcia (Spain).

PS2.7 Sophie Perrot (GEVES, Station Nationale d'Essais de Semences, France). European harmonization of evaluation of resistance of lettuce to *Bremia lactucae*.

PS2.8 Amanda van Dijk-Veldhuizen (Naktuinbouw, Roelofarendsveen, NL). IBEB and ABEB propose a streamlined lettuce differential set for *Bremia lactucae*.

### 18.30 END OF SESSION

20.30 Dinner (BBQ on roof terrace)

## Thursday 16 April

### S4 Postharvest quality

**Chair: Francisco Tomás-Barberán (CEBAS-CSIC, Spain)**

09.00 Jim Monaghan (Harper Adams University, UK)  
*Agronomy - the route from genotype to desirable phenotype.*

9:45 Maria Isabel Gil (CEBAS-CSIC, Spain)  
*Quality biomarkers of leafy vegetables*

10.15 Gail Taylor (University of Southampton, UK)  
*Elucidating the genetic basis of antioxidant status in lettuce (*Lactuca sativa*)*

10:45 Coffee

11.15 Marita Cantwell (UC Davis, USA)  
*TBC: Improving postharvest quality of leafy vegetable crops*

12.00 Ana Allende (CEBAS-CSIC, Spain)  
*Pre and postharvest strategies to reduce microbial risks of leafy vegetable crops*

12.30 Elisa Giambanelli (University of Bologna, Italy)  
*Different glucosinolates kinetic in italian and dutch kales as a result of cooking systems: boiling, steaming, and stir-frying.*

12.45 Simone Rossi (Cranfield University, UK)  
*The influence of pre-harvest and postharvest factors on cut-end browning in celery*

13.00 Lunch on pool terrace

14.15 Leave for technical trip to Primaflor

19:00 Return from technical trip



20.00 Leave for **conference dinner** at Restaurante la Casa del Reloj

23.30/00.30pm return from conference dinner

## **Friday 17 April**

### **S5 Exploring genetic diversity – ways to improve elite cultivars**

**Chair: Richard Michelmore (UC Davis, USA)**

09.00 Rob van Treuren (Centre for Genetic Resources, NL)

*Linking gene banking and plant breeding: opportunities and challenges*

09.45 Anne Giesbers (Wageningen University and Research Centre, NL)

*Downy mildew effector screening in lettuce (Lactuca) germplasm and its responses in L. saligna*

10.05 Luke Bell (University of Reading, UK)

*Exploring the phytochemical diversity of rocket salad*

10.25 Coffee

10.55 Ales Lebeda (Palacký University in Olomouc, Czech Republic)

*Resistance of wild Lactuca genetic resources to diseases and pests, and their exploitation in lettuce breeding*

11.25 Alex Beharav (University of Haifa, Israel)

*Genetic diversity in natural populations of rare wild Lactuca spp. The Wild Lettuce Gene Bank (WLGB) project*

11.45 Marieke Jeuken (Wageningen University and Research Centre, NL)

*Survey of reproductive barriers in an interspecific lettuce hybrid, L. saligna x L. sativa*

12.15 Brigitte Maisonneuve (INRA Avignon, France)

*Effect of the lettuce genotype on the protective efficacy of plant defence stimulators against Bremia.*

**12.45 Award of prizes for best poster and talk by early-career researchers**

**Awarded by Dr. Yuling Bai: Chairperson of EUCARPIA Section Vegetables**

**Awards of €400 for the best talk and €300 for the best poster  
sponsored by AL Tozer Ltd**



**13.00 Close of conference.** Lunch on pool terrace

## Certificate of attendance

We have pleasure in confirming that

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Attended the Eucarpia Leafy Vegetables Congress held in  
San Pedro del Pinatar, Murcia, Spain from 14-15 April 2015

Signed by the co-Chairs:



Dr Carol Wagstaff  
University of Reading



Dr Maria-Isabel Gil  
CEBAS-CSIC