

# Program

**March 20, 2018**

08:30-09:30

- Registration/good morning coffee/poster mounting

09:30-09:35

- Welcome by the COST chair Sebastien Carpentier

**Phenotyping Crop Biodiversity chair E Rosenqvist (DK)**

**Invited speaker**

09:35-10:05

- **Kristian Thorup University of Copenhagen, (DK).** "Semi-field phenotyping for root growth and function, early results from the RadiMax root phenotyping facility"

**Invited speaker**

10:05-10:45

- **Benjamin Kilian CROP TRUST, (GE)** "Crop diversity is the foundation of agriculture and phenotyping the gene banks is necessary to meet the never-ending challenge of sustainably producing sufficient and nutritious food for an increasing population"

10:45-11:20 Coffee Break

- **Orals (3x20 min)**

11:20-11:40 S Carpentier (BE) The quest for climate smart varieties: phenotyping the banana biodiversity present in the gene bank

11:40-12:00 A Junker (DE) High-throughput quantitative analysis of shoot properties in diverse maize Genebank accessions

12:00-12:20 C Ottosen (DK) Heat priming effects on anthesis heat stress in wheat cultivars with contrasting tolerance to heat stress

- Lunch- Break Poster Session

12:20-14:00

- **Visit of the KULeuven/Bioversity International gene bank and phenotyping facilities**

14:00-15:00

- **Orals (2x20 min)**

15:00-15:20 P Mylona (GR) Phenotyping legume crop performance: bottlenecks and solutions

15:20-15:40 M Maia (PT) Grapevine resistance to Plasmopara viticola: combining metabolomics and phenotyping for biomarker discovery

15:40-16:20 Coffee Break Poster Session

### **Integrated Solutions for high-end phenotyping Chair X Draye (BE)**

- **Orals (3x20 min)**

16:20-16:40 U Schurr (DE) Phenotyping from lab to field – technologies, concepts and integration

16:40-17:00 M Neal (UK) Low-cost sensors for environmental and crop growth monitoring in agricultural settings.

17:00-17:20 J Westergaard (DK) "PlotCut 2: Developing a high-throughput UAS (drone) image-data extraction tool for plant breeders with user-friendliness and business needs as the main priority."

### **Invited speaker**

17 :20-18:00

- **Cyril Pommier INRA; (FR)**, "Standardization in the phenotyping community."

18:30-19:30

- Guided tour in Leuven

19:30

- Conference dinner.

## **March 21, 2018**

08:30-09:00

- Registration

### **Integrated Solutions for high-end phenotyping Chair X Draye (BE)**

#### **Invited speaker**

09:00-09:40

- **Christophe Salon, INRA, (FR)** In the context of sustainable agriculture how, with plant high throughput phenotyping, can we address the various challenges?

#### **Orals (2x20 min)**

09:40-10:00 D Raymaekers (BE) Drone based phenotyping for plant breeders

10:00-10:20 J Marques da Silva (PT) Using reflectance spectroscopy and artificial intelligence techniques to automatically identify maize genotypes and water stress physiological effects

10:20-11:00

- Break Coffee Break Poster Session

### **Phenotyping for future climate scenarios Chair R van de Zedde (NL)**

#### **Orals (3x20 min)**

11:00-11:20 P Peltonen-Sainio (FI) Diversity Induced Improvements in Resilience to Climate Change - The Scale Matters

11:20-11:40 A Schulman (FI) ClimBar: An Integrated Approach to Evaluate and Utilize Genetic Diversity

11:40-12:00 I Rieu (NL) Reproductive thermotolerance in tomato - pollen are key

12:00-13:30

- Lunch- Break/Poster session

13:30-14:00.

- Poster speed presentations
- **Discussion COST, what's next? EMHPASIS, COST outputs Chair S Carpentier (BE) U Schurr (DE)**

14:00-15:00 Live audio interrogation with on line tool.

### **Phenotyping for future climate scenarios**

- **Invited speaker**

15:00-15:40 **Edith Lammerts van Bueren, WUR (NL)**, "Perspectives of breeding for ecological resilience"

- **Orals (2x20 min)**

15:40-16:00 M Kuska (DE) Combined analysis of gene expression and optical reflectance properties of barley differing in their resistances to powdery mildew

16:00-16:20 A Virosta (ES) Impact of water deficit on growth and yield components of two garlic (*Allium sativum* L.) cultivars at different crop stages

- **Invited speaker Arno Ruckelhausen (DE)** Tools for phenotyping.

16:20-17:00

17:00

- Farewell mixer