

# PLANT BIOPROTECH

1<sup>st</sup> INTERNATIONAL SYMPOSIUM  
ON PLANT BIOPROTECTION SCIENCES & TECHNOLOGIES  
Reims, France, June 27-30 2017

## PROGRAMME



# PROGRAMME

Tuesday 27<sup>th</sup> June 2017

From 12:00 Registration

14:00 - 15:00 Opening Session

- **Patrick DEHAUMONT** DGAL Ministry of Agriculture
- **Catherine VAUTRIN** President of Grand Reims
- **Arnaud ROBINET** Reims Mayor
- **Guillaume GELLE** President of the University of Reims
- **Christophe CLEMENT** Chair of the Congress

15:00 - 16:00 Opening Lectures

15:00 - 15:30

- **Denis FAURE** (Université de Paris Sud, France)

*Quorum-sensing and quorum-quenching in plant-bacteria interactions*

15:30 - 16:00

- **Karl-Heinz KOGEL** (University of Giessen, Germany)

*The new paradigm in plant biotechnology: healthy crop through gene silencing and genome editing?*

16:00 - 16:30 Coffee Break

16:30 - 17:30 Opening Lectures (continued)

16:30 - 17:00

- **Ilaria PERTOT** (Fondazione Edmund Mach, Italy)

*Sociomicrobiology: when a biocontrol or a plant pathogen intruder comes into a microbial community*

17:00 - 17:30

- **Faina KAMILOVA** (Koppert, Netherlands)

*Regulatory aspects of the placing of microbiological products on the market*

18:00 - 19:30

WELCOME RECEPTION at the CONGRESS CENTRE

## Wednesday 28<sup>th</sup> June 2017

**09:00 - 10:30**      Session 1: Elicitors and plant innate immunity      Chairs: M Höfte, C Clément

**09:00-09:30**      **KEYNOTE LECTURE**

• **Monica HÖFTE** (University of Ghent, Belgium)

***Role of cyclic lipopeptides produced by Pseudomonas spp. in biocontrol***

09:30 - 09:45

• **Carlos Andres MORENO-VELANDIA** (CORPOICA, Colombia)

***Direct effects of CLPs on Fusarium oxysporum explain part of the efficacy of Bacillus amyloliquefaciens Bs006 against Fusarium-wilt of Physalis peruviana***

09:45 - 10:00

• **Camille VERLY** (INRA-AgroParisTech/Staphyt, France)

***Impact of plant development stage and nitrogen supply on elicitor efficiency***

10:00 - 10:15

• **Luigi BAVARESCO** (Università Cattolica del Sacro Cuore, Italy)

***Proteomics and metabolomics responses of grapes treated by chitosan***

10:15 - 10:30

• **Nicole PONTARIN** (University of Picardie Jules Verne/Laboulet Semences, France)

***Temporal disruption of expansive and structural growth induced by  $\beta$ -aminobutyric acid (BABA) is associated with metabolic reorganisation in flax (Linum usitatissimum)***

**10:30 - 11:00**      **Coffee Break and Poster Session**

**11:00 - 12:30**      Session 1: Elicitors and plant innate immunity (continued)      Chairs: P Jacques, S Dorey

**11:00 - 11:30**      **KEYNOTE LECTURE**

• **Philippe JACQUES** (University of Liège, Belgium)

***The development of lipopeptides as innovative biocontrol product: from the discovery of the compounds to its registration***

11:30 - 11:45

• **Pierre VAN CUTSEM** (Université de Namur/FytoFend, Belgium)

***Chemical dialogue with plants – do you speak oligosaccharides?***

11:45 - 12:00

• **Noadya MONNIER** (Université de Picardie Jules Verne/Université Technologique de Compiègne, France)

***Rhamnolipids from Pseudomonas aeruginosa trigger defense responses in Brassica napus: highlighting and molecular study***

12:00 - 12:15

• **Estelle DEBOEVER** (University of Liège, Belgium)

***Antimicrobial activities of key intermediate plant oxylipins***

12:15 - 12:30

• **Marc ONGENA** (University of Liège, Belgium)

***Inter-kingdom crosstalk in the rhizosphere: when plants tame Bacillus to get immunized***

**12:30 - 14:00**      **Lunch Break**

**14:00 - 16:00**      Session 2: Microbial sensing and induced resistance      Chairs: C Pieterse, A Aziz

**14:00-14:30      KEYNOTE LECTURE**

• **Corné MJ PIETERSE** (University of Utrecht, Netherlands)

***The root microbiome and plant immunity***

14:30 - 14:45

• **Laure WEISSKOPF** (University of Fribourg, Switzerland)

***The potential of bacterial volatiles for plant protection against diseases***

14:45 - 15:00

• **Walter Patricio LUZURIAGA LOAIZA** (Université de Liège, Belgium - Université de Reims, France)

***Synthetic rhamnolipid bolaforms (SRBs) as inducers of plant innate immunity, an original research approach***

15:00 - 15:15

• **Céline TERRETTAZ** (University of Lausanne, Switzerland)

***Characterization of virulence factors contributing to the insecticidal activity of Pseudomonas protegens CHA0***

15:15 - 15:30

• **Ibrahim ALABID** (Justus Liebig University, Germany)

***N-acyl-homoserine lactones play a vital role in the biological activities of the endofungal bacterium Rhizobium radiobacter RrF4***

15:30 - 15:45

• **Sara LAKKIS** (University of Reims, France)

***Deciphering mechanisms underlying induced systemic resistance in grapevine by beneficial bacteria against Plasmopara viticola and Botrytis cinerea***

15:45 - 16:00

• **Stéphane COMPANT** (AIT Austrian Institute of Technology, Austria)

***The seed microbiota and plant growth and health***

**16:00 - 16:30      Coffee Break**

**16:30 - 18:00      Session 2: Microbial sensing and induced resistance (continued)      Chairs: S Declerck, E Ait Barka**

**16:30 - 17:00      KEYNOTE LECTURE**

• **Stephan DECLERCK** (Catholic University of Leuven, Belgium)

***Role of arbuscular mycorrhizal fungi in the bioprotection of plants against soil-borne and leaf pathogens***

17:00 - 17:15

• **Victor FLORS** (Universitat Jaume I, Spain)

***Arbuscular mycorrhiza fungi protects tomato plants against Botrytis cinerea through changes in the sugar plant metabolism***

17:15 - 17:30

• **Morgane COMBY** (Université de Calais, France)

***Screening of wheat endophytes as biological control agents against Fusarium head blight***

17:30 - 17:45

• **Monika MAURHOFER** (Swiss Federal Institute of Technology Zurich, Switzerland)

***Combination of plant-beneficial pseudomonads with entomopathogenic fungi and nematodes for insect control***

17:45 - 18:00

• **Marie-Noëlle BRISSET** (INRA Angers, France)

***Evaluation and optimization of the use of plant resistance inducers in apple orchards (PEPS project)***

## Thursday 29<sup>th</sup> June 2017

**09:00 - 10:30**      Session 3: Biocontrol in greenhouse and field trials      *Chairs: M Lorito, B Mauch Mani*

09:00 - 09:30      **KEYNOTE LECTURE**

• **Matteo LORITO** (University of Naples, Italy)

***Soil-borne beneficial microbes that improve food security (and safety)***

09:30 - 09:45

• **Jenny NEUKERMANS** (Provincial Proefcentrum voor de Groenteteelt Oost-Vlaanderen, Belgium)

***Biological crop protection in practice: optimization of the efficacy of biological crop protection products in (field) trials***

09:45 - 10:00

• **Heng YIN** (Dalian Institute of Chemical Physics, China)

***Oligosaccharides based biopesticides development and application***

10:00 - 10:15

• **Michele PERAZZOLLI** (Fondazione Edmund Mach, Italy)

***A novel biopesticide with a new mechanism of action against grapevine downy mildew***

10:15 - 10:30

• **Prashant SINGH** (INRA-CIRAD-Montpellier Supagro, France)

***Diversity in phyllosphere microbiomes of grapevine cultivars***

**10:30 - 11:00**      **Coffee Break and Poster Session**

**11:00 - 12:30**      Session 3: Biocontrol in greenhouse and field trials (continued)      *Chairs: M Ongena, KH Kogel*

11:00 - 11:15

• **Nicolas FABRE** (Agro-industries Recherche et Développement, ARD, France)

***Detection of biocontrol and biofertilisation microbial strains in environmental samples using quantitative PCR***

11:15 - 11:30

• **Pratibha PRASHAR** (University of Saskatchewan, Canada)

***Evaluation of commercial Trichoderma formulations for suppression of Aphanomyces root rot and promotion of plant growth in lentil***

11:30 - 11:45

• **Tony REGLINSKI** (Ruakura Research Centre, New Zealand)

***Integrated use of yeast-like fungi and acibenzolar-s-methyl for management of bacterial canker in kiwifruit***

11:45 - 12:00

• **Emilio STEFANI** (University of Modena and Reggio Emilia, Italy)

***COST Action CA16107 EuroXanth: integrating science on Xanthomonadaceae for integrated plant disease management in Europe***

12:00 - 12:15

• **Thijs de LANGHE** (De Ceuster Meststoffen NV, Belgium)

***Pepino mosaic virus vaccination as a biocontrol strategy for tomato production***

12:15 - 12:30

• **Yuko KRZYZANIAK** (INRA Dijon, France)

***A methodological framework to assess whether biostimulants can impact grapevine physiology and its responsiveness to elicitor-induced resistance***

**12:30 - 14:00**      **Lunch Break**

## Thursday 29<sup>th</sup> June 2017

### 14:00 - 18:30 Social Events

Visit of a Champagne Cellar and Tasting

Visit of the "Faux de Verzy" Regional Natural Park

### 20:00 - 23:30 Gala Dinner in the Congress Centre

## Friday 30 June 2017

### 09:30 - 10:30 Oral presentation of selected posters *Chair: P Jeandet*

*During the congress, 8 posters will be selected by the scientific committee of the congress. The results of the selection will be given on Thursday 29<sup>th</sup> during the morning session.*

*The authors of the selected posters will have 5 min to present their poster through 3-4 slides.*

### 10:30 - 11:00 Coffee Break and Poster Session

### 11:00 - 12:30 Session 4: Industrial perspectives about biocontrol *Chairs: J Rumbolz, C Arar*

#### 11:00 - 11:30 KEYNOTE LECTURE

- **Joachim RUMBOLZ** (Niefern-Öschelbronn, Germany)

***Registration of biologicals in Europe***

#### 11:30 - 12:00 KEYNOTE LECTURE

- **Chantal ARAR** (Agence nationale de sécurité sanitaire de l'alimentation, de l'environnement et du travail, ANSES, France)

***Assessment of low risk pesticides in the framework of regulation (CE) N°1107/2009***

12:00 - 12:15

- **Natthiya BUENSANTEAI** (Suranaree University of Technology, Thailand)

***Bioformulation of Bacillus subtilis CaSUT007 and CaSUT008 against soft root rot disease of Chinese green mustard***

12:15 - 12:30

- **Magali CASTAN** (Staphyt, France)

***EU microbial biopesticides and biostimulants: regulatory overview***

### 12:30 Concluding remarks. Next Plant BioProtech 2 in 2019