

Programme



Wednesday, 23 September

10:30 am - 1:30 pm Registration (lunch not included)

1:30 - 2:00 pm Welcome

2:00 - 2:50 pm **Keynote: Marnix Medema**, Deciphering the Chemical Language of Plant-Microbiome Interactions using Computational Omics

2:50 - 6:00 pm Session I. Chemical signals involved in plant response to their environment

Chairs: S. JASINSKI, H. NORTH, S. SOUNDIRAMOURTTY

2:50 - 3:20 pm **Keynote: J. C. D'AURIA**, Chemical Warfare in the Field: Unraveling the Biosynthetic Logic of Gramine and Hordenine

3:20 - 3:40 pm **Early career: L. LECLERC**, A multilateral dialogue: how biotic complexity shapes plant immunity

3:40 - 3:55 pm **S. HUIZINGA**, How do lettuce root exudates affect *Fusarium oxysporum*?

3:55 - 4:10 pm **T. BARRIT**, A GWAS-based study of iron nutrition, coumarins and plant defense using the *Arabidopsis/Dickeya* spp. Pathosystem

4:10 - 4:40 pm Coffee break

4:40 - 5:15 pm **IJPB keynote: A. VOXEUR, F. PERREAU, S. BOUTET, J. C TOTOZAFY**, The use of molecular profiling approaches to improve our understanding of interactions between plants and their environment

5:15 - 5:30 pm **S. FIRMIN**, MicroRNAs in root rhizodeposits: the missing piece of plant holobiont communication plasticity under abiotic stress

5:30 - 5:45 pm **K. BAUDRY**, A shared genetic network links p-coumaric acid, lignin traits, and water deficit responses in maize

5:45 - 6:00 pm **V. BEAUDOUX**, Induced allelopathy in rye: weed-specific root exudate signaling and benzoxazinoid-mediated responses

6:00 - 6:05 pm **COLASSE SA Company**, Flash talk

6:05 - 6:15 pm Break

6:15 - 9:00 pm Poster session & Cocktail event at IJPB (building 43)

Thursday, 24 September

9:00 - 11:55 am Session II. Perception and transduction of chemical signals

Chairs: C. GILLOTEAU, A. MARMAGNE, A. VOXEUR

09:00 - 09:30 am **Keynote: C. SANCHEZ-RODRIGUEZ**, Decoding the Cell Wall: How Plants Translate Extracellular Information into Growth and Defense Responses

09:30 - 09:50 am **Early career: A. DARD**, Glow with the flow: PerslcPLANT a new genetically encoded fluorescent biosensor to visualize hydropersulfides in plant cells

09:50 - 10:05 am **G. PANDHARIKAR**, Tree-Fungi Mutualistic Interactions: The Roles of Poplar Terpenes

10:05 - 10:20 am **A. BOO**, Programmable bacteria-to-plant chemical communication using HSL and peptide-gated gene circuits

10:20 - 10:50 am Coffee break

10:50 - 11:10 am **IJPB keynote: S. BONHOMME**, Bioynthesis and perception of strigolactones in a bryophyte, the moss *Physcomitrium patens*

11:10 - 11:25 am **S. SOUNDIRAMOURTTY**, Inositol Phospho Glycans, a mere by-product of membrane remodeling or key signaling molecule that mediate responses to biotic stress?

11:25 - 11:40 am **L. MONTICELLI**, Establishing *Physcomitrium patens* as a model to investigate chemical interactions with nitrogen-fixing cyanobacteria

11:40 - 11:55 am	A. DAVIERE , The pectic part of the cell wall as an important source of signals for plant response to the environment
11:55 am - 1:30 pm	Lunch (Building 43)
1:30 - 4:25 pm	Session III. Integration of chemical interactions in ecological communities and agroecosystems <i>Chairs: B. ALUNNI, D. FUSTER, O. LOUDET</i>
1:30 - 2:00 pm	Keynote: R. SAWERS , Host factors promoting benefit from arbuscular mycorrhizal symbiosis
2:00 - 2:20 pm	Early career: P. KROHN , Periderm integrity gates spatial chemical defence and fungal community assembly in roots
2:20 - 2:35 pm	K. SCHLAEPPI , Soil iron and root immune components mediate microbiome feedbacks in <i>Arabidopsis</i>
2:35 - 2:50 pm	U. HOECKER , Response of <i>Arabidopsis thaliana</i> to plant-plant competition
2:50 - 3:20 pm	Coffee break
3:20 - 3:40 pm	IJPB keynote: A. DELLAGI , Metabolic Reprogramming Drives Microbe-Mediated Nitrogen Acquisition
3:40 - 3:55 pm	C. VENEAL-FOURREY , Microbiota profoundly impact poplar host plant metabolites and root exudate content and composition
3:55 - 4:10 pm	S. CHOPRA , Maize specialized metabolites: their genetic regulation and ecological function in plant herbivory
4:10 - 4:25 pm	A. IHNATOWICZ , Linking metabolism and environment: discovery of novel enzymes in coumarin biosynthesis shaping stress responses in <i>Arabidopsis</i>
4:25 - 4:35 pm	G. MOUILLE , Peer Community In Plant
4:35 - 7:00 pm	free time
7:00 - 10:00 pm	Gala dinner at "La Flotille"

Friday, 25 September

9:00 - 11:00 am	Visits
11:00 - 11:20 am	Coffee break
11:20 am - 12:30 pm	Session IV. Agroecological innovations derived from the study of how plants interact with their environment <i>Chairs: S. BONHOMME, E. KING, J. MANGONI-MPAY</i>
11:20 - 11:50 am	Keynote: S. GOORMACHTIG , Decoding beneficial Plant–Microbe interactions: Citizen science and Omics-Driven Pathways to Sustainable Legume Production
11:50 am - 12:10 pm	Early career: P. HOMOBONO , Phenomic prediction to integrate plant-environment interactions in a cross-year framework for steviol glycosides assessment in <i>Stevia rebaudiana</i>
12:10 - 12:30 pm	IJPB keynote: M. CORSO , How seeds reshape their specialized metabolome for stress response and adaptation
12:30 - 2:00 pm	Lunch (Building 43)
2:00 - 2:15 pm	J. FERREIRA DE CARVALHO , Designing resistant and durable agroecological apple orchards
2:15 - 2:30 pm	L. ANDRUSZKOW & L. HURAU , Deciphering mechanisms of service plants involved in the disruption of host plant recognition by a specialist insect herbivore using complementary volatolomic approaches
2:30 - 2:45 pm	C. BENEZECH , 1 + 1 ≠ 2? Combined Biosolutions Reshape Durum Wheat Responses to Multiple Stresses
2:45 - 3:00 pm	G. GIANNELLI , Exploring below-ground metabolomic signatures of perennialism in New Perennial Grain lines
3:00 - 3:15 pm	A. KEBIECHE , From defence-related transcripts to metabolomic signatures: chemical modulation of carrot response to biocontrol under heat stress
3:15 - 3:35 pm	Closing ceremony (Poster/Talk prizes)