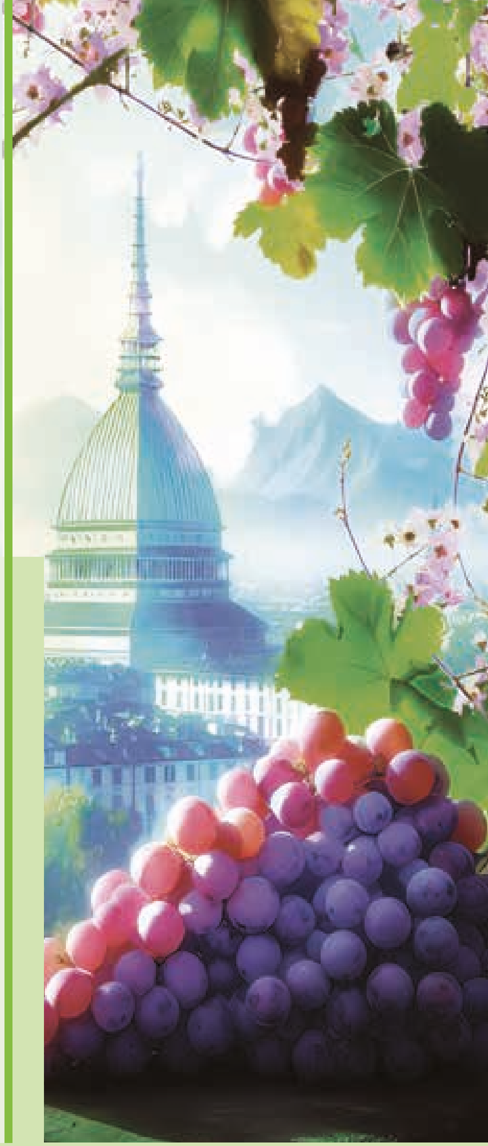
IOBC-WPRS

XVII
Meeting of the Working Group

Biological and integrated control of plant pathogens

From single microbes to microbiomes targeting One Health



June 11-14, 2025
Complesso Aldo Moro - Università degli Studi di Torino
Via Verdi, 10123 Torino

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IOBC-WPRS
UNIVERSITÀ DI TORINO
DISAFA
AGRINNOVA
SIPaV Società Italiana di Patologia Vegetale
AIPP
Mediterranean Phytopathological Union

WELCOME

Welcome to the XVII IOBC-WPRS Working Group Biological and Integrated Control of Plant Pathogens!

The general goal of the Working Group is to promote cooperation among scientists, to facilitate the exchange of expertise on biological control against plant diseases caused by plant pathogens and to support its implementation in agriculture across the West Palaearctic Region and beyond. The Working Group organizes workshops for scientists and extension specialists as well as producers and final users of biological control products.

The XVII workshop "From single microbes to microbiomes targeting One Health" will focus on the role of microorganisms that are isolated, selected, characterized, and deployed to control plant pathogens going beyond plant health to protect organismal health in a holistic approach. A total of 146 contributions were submitted, five will be presented as invited talks, 48 as oral presentations, 44 as flash talks and 49 as posters. The contributions have been organized in ten sessions. Application of biocontrol agents, as single strains or in consortia, will be presented and discussed in a context of climate change to control emerging and complex plant diseases. The partnership between industry and academia will be explored to improve and make more efficient the production and deployment of biocontrol products. Moreover, recent findings will be presented about how to explore new sources of biocontrol agents, the mechanisms that regulate the complex interactions among microbes, plants, and pathogens. Last, but not least a roundtable has been organized to discuss how to overcome current bottlenecks in the biocontrol product registration process to avoid unnecessary delays and costs. Ample time has been allocated to allow knowledge exchange and to deepen the discussion among participants about how biological control can be fostered under changing climate conditions that affect plant, animal, and human wellbeing.

Scientists representing 36 countries from the six continents will join and contribute to the quality and biodiversity of the meeting.

We look forward to meeting you in Torino,

Davide Spadaro and Monica Mezzalama, Chairs

Tomislav Cernava, Convenor

COMMITEES

Scientific Council

- Marc Bardin, France
- Paola Battilani, Italy
- Gabriele Berg, Austria
- Tomislav Cernava, UK
- David Collinge, Denmark
- Robert Czajkowski, Poland
- Samir Droby, Israel
- Monica Höfte, Belgium
- Magnus Karlsson, Sweden
- Jürgen Köhl, The Netherlands
- Monica Mezzalama, Italy
- Gianfranco Romanazzi, Italy
- Sabrina Sarrocco, Italy
- Davide Spadaro, Italy
- Neus Teixidó, Spain
- Sheridan Lois Woo, Italy

Local organizing commitee

- Francesco Aloi
- Domenico Bertetti
- Giovanna Gilardi
- Paolo Gonthier
- Vladimiro Guarnaccia
- Guglielmo Lione
- Ilaria Martino
- Monica Mezzalama
- Davide Spadaro

ENDORSED BY

IOBC-WPRS

UNIVERSITÀ DI TORINO

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RESEARCH BEARS ITS FRUITS

SIPaV
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Italian Phytopathological Society

AIPP

Mediterranean Phytopathological Union

Olubukola Oluranti Babalola

Faculty of Natural and Agricultural Sciences, North-West University, South Africa; Department of Life Sciences, Imperial College London, UK

Professor Olubukola Oluranti Babalola is a leading scientist dedicated to capacity building and food security.
She serves as Vice-President of both UNESCO-TWAS and UNESCO-OWSD (Africa) and holds key roles as Foreign Secretary, International Advisor, Board member, Committee Chair, etc, in other notable international organizations.
A Visiting Professor at Imperial College London and Director of Food Security and Safety at North-West University, South Africa, she is Africa's top-ranked scientist in Soil Science and Plant Nutrition.
Her work spans rhizosphere meta-omics, organic amendments, and policy advocacy. With a PhD supported by IITA and OWSD, and postdocs in Israel and South Africa, she champions SDG#2: Zero Hunger.

Neus Teixidó

Research Institute of Technology, food and agriculture (IRTA), Catalonia, Spain

Dr Neus Teixidó, senior research scientist, is the Director of Postharvest Department at IRTA, and the coordinator of the Plant Health HUB for the organization and harmonization of Plant Health Research in Catalonia. Her research activity includes the control of postharvest diseases of fruits using several physical, chemical and biological alternative techniques, the study of epidemiology, and fruit-pathogen interactions in different pathosystems. She has over 25 years of experience in the development of biocontrol agents. She was a teacher in the Master's Degree in Management and Innovation in the Food Industry (UdL) for 15 years and she is teaching in the International Course of Technology and Post-Harvest Management of Fruit (IRTA) from which has been the Director from 2018 to 2023.

Magnus Karlsson

University of Agricultural Sciences in Uppsala, Sweden

Dr. Magnus Karlsson is currently acting as Professor in Plant Pathology at the Swedish University of Agricultural Sciences in Uppsala, Sweden.

His work focuses on biological control of plant diseases and disease resistance breeding, with a strong component of molecular biology, genomics and evolutionary biology.

Gabriele Berg

Institute of Environmental Biotechnology, Graz University of Technology, Austria; Leibniz Institute for Agricultural Engineering and Bioeconomy, Potsdam, Germany; Institute for Biochemistry and Biology, University of Potsdam, Germany

Prof. Berg studied biology, ecology and biotechnology at the universities of Rostock and of Greifswald (Germany), and obtained her Ph.D. in 1995 in microbiology from Rostock University. In 2005 she became a full professor in environmental biotechnology at Graz University of Technology (Austria), and in 2021 an additional professorship in Potsdam together with a position at Leibniz ATB (Germany). She is a Max-Planck-Fellow at the MPI of Colloids and Interfaces in Potsdam. Her interest focuses on microbiome research and translation of the results into new biotechnological concepts for health issues. Her main contributions include many key facts related to the interconnected plant microbiome. She belongs to the most cited researchers worldwide (highly cited researcher 2019-21, 2024), and received several awards.

Birgit Jensen

Faculty of Science, Department of Plant and Environmental Sciences, Section for Microbial Ecology and Biotechnology, University of Copenhagen

Prof. Jensen has a 25 years' experience on biological control of plant diseases focusing on ecological approaches "from field to lab and back to the field again". This includes isolation and screening of potential BCAs using in vivo experiments mimicking natural environmental conditions and studies of mechanisms of biocontrol. Microbial community studies using both cultural dependent and independent methods in the search for novel BCAs and understanding how BCA may affect microbial diversity and abundance of natural microbiota has been a major focus in recent years.

DAY 1 Conference Programme 11 June

12.00 - 14.00 Registration of participants

14.00 - 14.30 Opening and welcome remarks
University of Torino, DISAFA, SIPAV, AIPP, MPU, IOBC Meeting Convenor

14.30 - 16.30 **SESSION I - Biocontrol for resilient cropping systems tackling climate change**
Chairpersons: T. Cernava, C. Casals

14.30 - 15.00 Biocontrol for resilient cropping systems tackling climate change — I-01
Invited Speaker: *O.O. Babalola - North-West University, South Africa*

15.00 - 15.30 Flash talks

Identification of treatments that prolong chronological lifespan of the biocontrol yeast *Metschnikowia pulcherrima* in a temperature-dependent manner in vitro and on tomato seeds. *A. Feuillet, F. Florian - Agroscope, Switzerland* — F-01

Deciphering the mode of action and the environmental impact of a fungal biocontrol agent against *Botrytis cinerea*. *C. Lepinay, P. Nicot, M. Duffaud, J.F. Bourgeay, M. Bardin*
INRAE - France — F-02

Prospective for biocontrol implementation of the chestnut blight fungus *Cryphonectria parasitica* in Friuli Venezia Giulia. — F-03
S. Tomada, A. Kabir, L. Poggetti, V. Cacitti, M. Fabro, S. Baric - Agenzia Regionale per lo Sviluppo Rurale del Friuli Venezia Giulia ERSA, Italy | University of Bozen-Bolzano, Italy

Exploring the multifunctional potential of indigenous Brazilian *Trichoderma isolates* and developing an innovative, sustainable bioreactor-in-a-granule formulation. — F-04
L. Guedes da Silva, G. Moura Mascarin, R. Cintra Camargo, C.P. Favaro, P.SO Nunes, C. Sanches Farinas, C. Ribeiro, W. Bettiol - Embrapa Meio Ambiente, Brazil

Rhizosphere bacteria from the Bolivian highlands improve growth and drought tolerance in quinoa (*Chenopodium quinoa* Willd.). — F-05
V. Gonzales, M. Huallpan, X. Ramirez, Y. San Miguel, M. Dubey, D.F. Jensen, M. Karlsson, C. Crespo
Swedish University of Agricultural Sciences, Sweden | Universidad Mayor de San Andrés, Bolivia

15.30 - 16.30 Oral presentations

Microbial inoculants affect the composition and function of the maize rhizosphere microbiome and mitigate the impact of abiotic stress factors on host plants. — O-01
R. Grosch, D. Francioli, I.D. Kampouris, T. Kuhl-Nagel, J.H. Behr, R. Zrenner, D. Babin, L. Sommermann, M. Schloter, U. Ludewig, K. Smalla, G. Neumann, J. Geistlinger
Leibniz Institute of Vegetable and Ornamental Crops (IGZ), Germany | Hochschule Geisenheim University, Germany | Germany Anhalt University, Germany | University of Hohenheim, Germany

	Selection of bacterial biocontrol agents to contrast the soil borne pathogen *Armillaria mellea* and support plant growth *M. Miyassa Aci, G. Pelle, G.E. Agosteo, A. Malacrinò, L. Schena* *Università degli Studi Mediterranea di Reggio Calabria, Italy | Clemson University, USA*	O-02
	Is it possible to manipulate the microbiome of growing medium for disease suppression during cucumber cultivation in soilless system? *M.A. Stremińska, S.J. Breeuwsma, G.D. Greve, H.M.I. Huisman, J.P.M. van Ruijven* *Wageningen University & Research, The Netherlands*	O-03
	Microbial consortia from the apple microbiome: effective biocontrol agents adapted to diverse environmental conditions *A.M. Sánchez, C. Casals, J. Oliva, C. Solsona, N. Teixidó* *IRTA, Postharvest, Fruitcentre, Spain | University of Lleida, Spain*	O-04
16.30 - 17.00	Coffee break	
17.00 - 19.00	**SESSION II - Biocontrol targeting One Health** *Chairpersons: P. Battilani, V. Guarnaccia*	
17.00 - 17.30	Flash talks	
	3D platforms made from biopolymers for the sustained release of microorganisms in biological control applications *T. Bombarda, A. Millás, M. Fontes, J. Silva, H. Barud* *Universidade de Araraquara, Brazil | DBS, Brazil | Universidade Federal de São Carlos, Brazil*	F-06
	Selection of antagonistic yeasts for the control of strawberry postharvest rots and their effect on the fruit microbiome *G. Remolif, M. Garello, S. Prencipe, V. Guarnaccia, M. Mezzalama, D. Spadaro* *University of Torino, Italy*	F-07
	Enhancing the biocontrol potential of Lysobacter capsici AZ78 against *Pythium ultimum* in soil utilising organic amendments *A.J.D. Kothari, G. Puopolo* *University of Trento, Italy | Fondazione Edmund Mach, Italy*	F-08
	Application of multifunctional *Bacillus velezensis* CMC-6 for straw degradation *H. Zhou, D. Wang* *Academy of Agricultural and Animal Husbandry Sciences, China*	F-09
	Uncovering the potential of *Bacillus* strains in promoting wheat growth under biotic and abiotic stresses *A. Govin-Sanjudo, M.M. Rojas-Badia, Q. Desjonquères, J.F. Guise, C. Jacquard, Q. Esmaeel INRAE, France | Universidad de La Habana, Cuba*	F-10

DAY 1 Conference Programme — 11 June

17.30 - 19.00 Oral presentations

Exploring rhizosphere microbiomes in Mediterranean Vineyards through metabarcoding analysis: insights from Italy, Portugal, Morocco, and Turkey — O-05
E. Soriato, D. Danzi, M. Calgaro, N. Vitulo, R. Shmuleviz, G.B. Tornielli, F. Spinelli, C. El Modafar, M.E. Duru, Y. Uysal, M. Yıldız, L.T. Dinis, J. Prada, M.C. Santos, E. Vandelle
Università degli Studi di Verona, Italy | Università di Padova, Italy | Università di Bologna, Italy | Cadi Ayyad University, Morocco | Muğla Sıtkı Koçman University, Turkey |Mersin University, Turkey | Apricot Research Institute, Turkey | University of Trás-os-Montes and Alto Douro, Portugal | University of Porto, Portugal

Use in a controlled environment of *Trichoderma asperellum* ICC012 and *Trichoderma gamsii* ICC080 to manage FHB on common wheat — O-06
M. Cesarini, A. Petrucci, E. Hotaj, G. VenTorinoi, R. Liguori, S. Sarrocco
University of Pisa, Italy | University of Trento, Italy | University of Copenhagen, Denmark Gowan Novara Isagro S.p.A., Italy

Combinations of beneficial microbes and lignin copper nanoparticles for sustainable control of *Plasmopara viticola* on Falanghina grapevines — O-07
G. Manganiello, S. Lanzuise, C. Cimminella, M. Crimaldi, R. Marra, N. Lombardi, M. Lorito, L. Moio, S.L. Woo
University of Naples Federico II, Italy

From compost microbiomes to potentially disease suppressive bacterial isolates — O-08
A. Logo, B. Thuerig, B. Boppré, J. Fuchs, M. Maurhofer, T. Oberhänsli, F. Widmer, P. Flury, J. Mayerhofer Agroscope, Switzerland

The genetic architecture underlying plant-microbiome interactions is altered under increasing environmental temperature — O-09
A. Malacrinò, N.Z. Mohamed, L. Schena
Clemson University, USA | Università degli Studi Mediterranea di Reggio Calabria, Italy

Crop residue management to decrease *Alternaria solani*, *Cercospora beticola* and *Alternaria dauci* inoculum in arable crop rotation systems — O-10
G. Elena, A. Evenhuis, I. Houwers, L. Groenenboom-de Haas, E. de Lange, J. Köhl
Wageningen University, The Netherlands

SIPAV Award delivery to M. Calì, D. Nicotra and E. Soriato

19.00 - 20.45 Welcome Cocktail

DAY 2 Conference Programme 12 June

08.30 - 10.30	**SESSION III – Development of single strains, synthetic consortia, and micro-biomes** *Chairpersons: G. Berg, D. Spadaro*	
08.30 - 09.00	Designing a healthy plant microbiome by costumized single strain, synthetic consortia, and microbiomes transplants *Invited Speaker: G. Berg, A. Abdelfattah, A. Wolfang, B. Wassermann, E. Olimi, W. Wicaksono, S. Bickel, T. Cernava* *Graz University, Austria | University of Potsdam, Germany | University of Southampton, UK*	I-02
09.00 - 09.30	Flash talks	
	Extremophilic yeasts as biological control agents of *Penicillium expansum* and their role in patulin reduction *M. Lucci, G. Firrao, A. Di Francesco* *University of Udine, Italy*	F-11
	The apple sooty blotch pathobiome: composition and microbial interactions *F. Rey, S. Oettl, H. Schuler* *Laimburg Research Centre, Italy | University of Bozen-Bolzano, Bolzano, Italy*	F-12
	Fungal isolates reduce *Phytophthora infestans* infection in tomato *P. Orwa, T. Kuhl-Nagel, R. Mwirichia, J.A. Jehl, A. Linkies* *Julius Kühn Institute (JKI), Germany | Leibniz Institute of Vegetable and Ornamental Crops (IGZ), Germany | University of Embu, Kenya*	F-13
	Engineering resilient microbial communities to control postharvest diseases *M.M. Aci, N.Z. Mohamed, L. Schena, A. Malacrinò* *Università degli Studi Mediterranea di Reggio Calabria, Italy |Clemson University, USA*	F-14
	Evaluation of the impact of storage protocols on complex soil communities in agricultural pathosystems *M. Garello, F. Sbarra, F. Aloi, F. Sevi, E. Colantoni, B. Aracri, S. Tabacchioni, A. Visca, G.C. Varese, L. Cocolin, I. Ferrocino, A. Bevivino, D. Spadaro* *University of Torino, Italy | Italian National Agency for New Technologies, Energy and Sustainable Economic Development, ENEA, Italy*	F-15
09.30 - 10.30	Oral presentations	
	From microbiome to SynComm: developing biocontrol agents for the strawberry phyllosphere *B. Newman, K. Macharis, L. Vlasselaer, W. Smets, B. De Coninck, S. Lebeer* *University of Antwerp, Belgium | KU Leuven, Belgium*	O-11

	Biocontrol of grapevine downy mildew: a synthetic microbial community (SynCom) approach *A. Jaswa, V. Martin, P. Fournier, M. Chargy, M.C. Dufour, I. Masneuf-Pomarede, S. Labarthe, J. Vallance, G. Martins, C. Vacher* *INRAE, France | Université de Bordeaux, France | Utah State University, USA*	O-13
	Dual-action bacterial consortium: antagonistic effects against *Fusarium oxysporum* and growth promotion in tomato crops *D. Mendoza Jiménez, H.P. Reyes Pool, U. Esquivel Naranjo, F. Landeros jaime, J. A. Cervantes Chávez* *Universidad Autónoma de Querétaro, Mexico*	O-14
10.30 - 11.00	Coffee break	
11.00 - 13.00	**SESSION IV - Biocontrol of emerging and complex plant diseases** *Chairpersons: S. Sarrocco, , M. Mezzalama*	
11.00 - 11.30	Flash talks	
	Evaluation of the antifungal activity of endophytic organisms against Fusarium fruit rot in tomato *N.A. Rajput, M. Atiq, M. Wahab, M. Usman, A. Nawaz, M. Usman Ali, H. Ahmad* *University of Agriculture, Pakistan*	F-16
	Evaluation *of Pseudomonas* chlororaphis M71 and *Trichoderma atroviride* SC1 movement and persistence after their injection in the trunk of grapevine plants affected by Esca *G. Brussi, G. Puopolo, S. Di Marco, L. Mugnai, I. Pertot* *University of Trento, Italy | Fondazione Edmund Mach, Italy | National Research Council, Italy | University of Florence, Italy*	F-17
	Development of new biological management strategies to control 'Mal dello stacco' disease of hazelnut *V. Piattino, I. Martino, M. Maspero, T. De Gregorio, D. Spadaro, V. Guarnaccia* *University of Torino, Italy | Ferrero Group, Luxembourg*	F-18
	Preharvest application of *Bacillus velezensis* 12Y improves strawberry fruit quality and storability *M. Chen, Z. Xu, Y. Yue, Z. Cai, H. Xiao* *Nanjing Agricultural University, China*	F-19
	Promising approaches for the management of kiwifruit vine decline syndrome by biocontrol agents *P. Ermacora, C. Bernardini, S. Saro, P. Bianco, S. Tomada, M. Fabro, M. Martini* *University of Udine, Italy | Agenzia Regionale per lo Sviluppo Rurale del Friuli Venezia Giulia - ERSA, Italy*	F-20

DAY 2 Conference Programme 12 June

11.30 - 13.00	Oral presentations	
	From grapevine to grapevine: microbial community from table grape to manage grapevine trunk diseases *F. Dalena, D. Gerin, A. Agnusdei, D. Cornacchia, G.L. Bruno, F. Mannerucci, F. Faretra, S. Mavica, D. Aiello, S. Pollastro* *University of Bari Aldo Moro, Italy | University of Catania, Italy*	O-15
	From lab to field: insights into the use of biological control agents against Fusarium root and crown rot in durum wheat *E. Cappelletti, D. Alberoni, M. Calì, F. Cavina, D. Di Gioia, A. Prodi* *University of Bologna, Italy | Terremerse Soc Coop, Italy*	O-16
	Bacillus velezensis NM-24 as a sustainable plant growth promoter and biocontrol agent against fungal diseases of potato *N. Muzhinji, V. Ntuli, W. Swart, H. Fosa* *University of the Free State, South Africa | University of Venda, South Africa*	O-17
	Effects of microbial biocontrol agents on tomato physiology, productivity and response to biotic and abiotic stresses *M. Sinno, G. Manganiello, A. Dinesh Kothari, G. Dimaria, G. Puopolo, I. Pertot, V. Catara, S. L. Woo, R. Marra* *University of Naples Federico II, Italy | University of Trento, Italy | Fondazione Edmund Mach, Italy | University of Catania, Italy*	O-18
	Assessment of efficacy and side effects of a new sustainable fungicide against grapevine diseases *S. Montanari, M. Hartmann, A. Nesler, C.M.O. Longa, M. Perazzolli* *University of Trento, Italy | Fondazione Edmund Mach, Italy Institute of Agricultural Sciences, Switzerland | Bi-PA nv, Technologielaan 7, Belgium*	O-19
	Control and antifungal mechanism of protocatechuic acid ester on postharvest gray mold disease of strawberry fruit *S. Yuan, X. Yue, X. Xu, Q. Wang* *Beijing Academy of Agriculture and Forestry Sciences, China*	O-20
13.00 - 14.00	Lunch	
14.00 - 16.00	**SESSION V - Mass production, formulation, and application of biocontrol agents** *Chairpersons: N. Teixidó, F.H. Vasconcelos de Medeiros*	
14.00 - 14.30	Multifunctional products based on biocontrol agents from microbiome: new solution to control postharvest diseases *Invited Speaker: N. Teixidó, C. Casals, M. Miranda, A.M. Sánchez, R. Torres* *IRTA, Postharvest, Fruitcentre, Spain*	I-03
14.30 - 15.00	Flash talks	

Nanoparticle-based strategies for controlling *Alternaria alternata*: a step towards sustainable crop protection F-21
A. Klein
University of the Western Cape, South Africa

Prototype formulation of *Aureobasidium pullulans* strains: efficacy against grey mould of table grape F-22
R. Cignola, A. Di Francesco
University of Udine, Italy

Encapsulation of entomopathogenic fungus using spray drying: sustainable biological control of agricultural pests and diseases F-23
M.J. Mieli, P. de Abreu Fernandes, J.E. Marcondes de Almeida, H. da Silva Barud
University of Araraquara, Brazil | Biological Institute, Brazil

Optimizing growth conditions for *Metschnikowia pulcherrima*: a comprehensive approach F-24
B. Dinić, F. Freimoser, F. Grasso, N. Bokulic, U. von Ah
Agroscope, Switzerland | Institute of Food, Nutrition, and Health, Switzerland

After planting microbial nematicide application reduced *Meloidogyne incognita* reproduction in soybean F-25
Y. de Castro Vilela, R. Coelho Silva, B.A. Antonio de Sousa e Silva, R. Araújo Guimarães, F.H. Vasconcelos de Medeiros
Federal University of Lavras, Brazil

15.00 - 16.00 Oral presentations

Can bee-vectored bacteria remediate the degenerated strawberry flower microbiome in intensively managed greenhouses? O-21
J. Temmermans, M. Legein, I. Checchica, G.E. Felis, W. Smets, R. Karise, B. De Coninck, F. Kiekens, S. Lebeer
University of Antwerp, Belgium | University of Verona, Italy | Estonian University of Life Sciences, Estonia | KU Leuven, Belgium | Provincial Institute for Hygiene (PIH), Belgium

WheatSimpCom project: From metagenomic data to plant health – identifying microbial candidates and designing a microbial simplified community for effective biocontrol in wheat O-22
Q. Desjonquères, L. Wolff, M. Ancelle, J. Mauclert, F. Adam, D. Muller, C. Jacquard, C. Vacher, C. Prigent-Combaret, Q. Esmaeel
Université de Reims Champagne-Ardenne, France |Université de Lyon, France | INRAE, Univ. Bordeaux, France | Cérèsia, Reims, France

Challenges in scaling, stabilizing, and formulating biocontrol agents for pest management from an industrial perspective O-23
A. Peters
e-nema GmbH, Germany

DAY 2 Conference Programme 12 June

	From *in vitro* selection to field evaluation of endophytic bacteria against Fomitiporia mediterranea, a key pathogen of Esca, a grapevine trunk disease *O. Mesguida, R. Travadon, A. Yacoub, M. Meslier, S. Compant, S. Godin, M. Le Béchec, A. Dreux-Zigha, J.Y. Berthon, É. Attard, P. Rey* *Université de Pau et des Pays de l'Adour, France | Greencell, France*	O-24
16.00 - 16.30	Coffee break	
16.30 - 18.30	**SESSION VI - ROUND TABLE - A winding road to biopesticides registration: bottlenecks and opportunities** *Domenico Deserio, EU Commission* *Jennifer Lewis, IBMA, Belgium* *Cristina Vespignani, Agrintesa, Italy* *Baldissera Giovani, Euphresco Network, France* *Chair: Gianfranco Romanazzi, Italian Association for Plant Protection, Italy*	R-01
18.30	Free time - Torino sightseeing	
	Free dinner	

DAY 3 Conference Programme 13 June

08.30 - 10.30	**SESSION VII - Unexplored sources of potential biocontrol agents** *Chairpersons: B. Jensen, A. Malacrinò*	
08.30 - 09.00	Fungal diversity: From isolation and characterisation of populations to utilisation of fungal strains in plant disease control *Invited Speaker: B. Jensen, D.B. Collinge, H.J.L. Jørgensen* *University of Copenhagen, Denmark*	I-04
09.00 - 09.30	Flash talks	
	Effect of root rot infection on rhizosphere microbial community of *Panax notoginseng* *Y. Wang, R. Guo, M. Sun, S. Li, M. Luo, X. Lu* *Chinese Academy of Agricultural Sciences, China*	F-26
	Exploring endophytic bacteria as biological control agent for *Ganoderma* basal stem rot infection in oil palm: integrated disease management in the field *S. Sundram, G. Periasamy, M.H. Rusli, S.A. Sirajuddin, A.L. Pei Lee, A. Baskaran, L. Sangsun* *Malaysian Palm Oil Board (MPOB), Malaysia | CJ Bio Malaysia Sdn Bhd., Malaysia*	F-27
	Isolation and screening of endophytes as potential biocontrol agents against latent and wound postharvest pathogens of apples *G. Remolif, V. Guarnaccia, D. Spadaro* *University of Torino, Italy*	F-28

	Impact of stump treatments based on *Pseudomonas protegens* against *Heterobasidion irregulare* on non-target microbes as determined by metagenomics *G. Lione, M. Pellicciaro, P. Gonthier* *University of Torino, Italy*	F-29
	Exploring the grapevine microbial endosphere in the context of flavescence dorée *I.C. Malnis, L. Nerva, S. Borselli, W. Chitarra, P. Ermacora, M. Martini* *Council for Agricultural Research and Economics, Italy | Institute for Sustainable Plant Protection, CNR, Italy | University of Udine, Italy*	F-30
09.30 - 10.30	Oral presentations	
	Spinach seed-inhabiting microorganisms are associated with suppression of seedling disease in the Spinach – *Globisporangium ultimum* pathobiome *M. Diakaki, W. de Boer, J. Postma* *Wageningen University, The Netherlands | Netherlands Institute of Ecology, The Netherlands*	O-25
	Endophytes as rice seed dressing for the biological control of *Fusarium fujikuroi* *S. Bosco, S. Prencipe, M. Mezzalama, D. Spadaro* *University of Torino, Italy*	O-26
	Known antagonistic microbiota are key drivers in suppressive soils against *Sclerotinia sclerotiorum*, a widespread soil-borne fungal plant pathogen *V.C. Han, N.E. White, P.J. Michael, B. Swift, D. Vu, S.J. Bennett* *Curtin University, Australia | Westerdijk Fungal Biodiversity Institute, The Netherlands*	O-27
	Cultivar-specific root exudates enhance the resistance of susceptible cucumber cultivar to Fusarium wilt through recruitment of beneficial microbiota *A. Adeniji, Q. Liu, X. Huang, S. Li, X. Lu, R. Guo* *Chinese Academy of Agricultural Sciences, China | Ningjiang Center of Black Soil Conservation and Monitoring, China*	O-28
	IOBC-WPRS Award delivery to: S. Bosco, M. Diakaki, M. Grimonpont, J. Temmermans	
10.30 - 11.00	Coffee break	
11.00 - 13.00	**SESSION VIII - Industry and academia: a winning partnership for biocontrol product development** *Chairpersons: G. Elena, W. Bettiol*	
11.00 - 11.30	Flash talks	
	Orange you glad it's not chemicals? Biocontrol of Citrus soilborne diseases *S. van der Walt, M. Badiwe, L.J. Rose, J. van Niekerk* *Stellenbosch University, South Africa | Citrus Research International, South Africa*	F-31
	Boosting the performance of Pythium oligandrum for biocontrol and biostimulation in potato *N. Ramírez, L. Grenville-Briggs* *Swedish University of Agricultural Sciences, Sweden*	F-32

Standardised methods to screen the efficacy of a novel biological control fungicide against fungal pathogens *in vivo* and *in vitro* F-33
C. Agius, F. Mansouri, S. Nadalini, G. Manneveld
EpiLogic GmbH, Germany

Contribution of crop residues of grasses and exhausted substrate from mushroom production in the establishment of *Trichoderma asperellum* (BV 10) F-34
J. Oliveira de Paulo, B.A. Antonio de Sousa e Silva, R.C. Silva, F.H.V. de Medeiros
Federal University of Lavras, Brazil

Optimizing resistance inducers application: a model for simulating their protection dynamic over time F-35
S.E. Legler, E. González-Dominguez, G. Fedele, V. Rossi
Horta srl., Italy | Università Cattolica del Sacro Cuore, Italy

11.30 - 13.00 Oral presentations

A web-based platform for biologicals in coffee production: a dynamic tool to offer updated content and connection between stakeholders O-29
F.H.V. Medeiros, M.B. Silva Junior, V. Foresti Pereira Alves, D.L. Pereira, M.A. Magalhães, T. Teruel Resende, V. Labory Carvalho de Souza
Federal University of Lavras, Brazil | BIOTROP - TOTAL BIO, Brazil

Abiotic stressors and their influence on *Lysobacter enzymogenes* efficacy against grapevine downy mildew O-30
K. Yubonphan, A. Linkies, J. Maier, S. Kunz, A. Peters, M. Touceda, S. Weißhaupt, Y. Rondot
Hochschule Geisenheim University, Germany | Julius-Kühn-Institute (JKI), Germany Bio-Protect GmbH, Germany | e-nema GmbH, Germany

Aureobasidium pullulans and its multiple potentials in biological control: pullulan production for postharvest fungaò diseases management O-31
A. Di Francesco, M. Di Foggia, M. Lucci, R. Cignola
University of Udine, Italy | University of Bologna, Italy

Microbiome communities exhibit type-specific function in key Champagne grape varieties from the Champagne region in France O-32
D. Legesse, A. Wavrant, F. Oszust, T. Massy, L. Mercier, S. Leporini, A. Hahn, N. Nassr, F. Fontaine, C. Jacquard, E. Ait Barka, L. Sanchez, Q. Esmaeel
Université de Reims Champagne-Ardenne, France | MOËT & CHANDON, France | MOËT HENNESSY, France | Agro Industrie Recherches et Développements (ARD), France | RITTMO Agroenvironnement, France

Harnessing Streptomyces for sustainable biocontrol in agriculture: the discovery of Streptomyces sp. GanoSA1 O-34
S.M. Syed Aripin, S. Sundram, M.H. Rusli, R. Andersen
Malaysian Palm Oil Board (MPOB), Malaysia | Pascal Biotech, Malaysia

DAY 3 Conference Programme 13 June

13.00 - 13.30	Lunch box	
13.30	Field visit - departure to Fontanafredda - Langhe area	
19.00 - 21.00	Social dinner	
21.00	Return to Torino	

DAY 4 Conference Programme 14 June

08.30 - 10.30	**SESSION IX - Mechanisms behind plant-microbe-antagonist interactions** *Chairpersons: M. Karlsson, A. Di Francesco*	
08.30 - 09.00	Mechanisms behind microbe-microbe and plant-microbe interactions *Invited Speaker: M. Karlsson, A. Ruffino, E. Piombo, M. Dubey* *Swedish University of Agricultural Sciences, Sweden*	I-05
09.00 - 09.30	Flash talks	
	Decoding the ecological impact of tailocins in Soft Rot *Pectobacteriaceae* *M. Borowicz, D.M. KrzyŻanowska, R. Czajkowski* *University of Gdansk, Poland*	F-36
	Intraspecific variation in virulence of a mycoparasitic fungus suggests evolution of host specificity *A. Ruffino, H. Friberg, G. Tzelepis, M. Karlsson* *Swedish University of Agricultural Sciences, Sweden*	F-37
	Microbial interactions in crop protection: multi-omic analyses of the plant perception to biological control agents *M. Sinno, I. Di Lelio, G. Manganiello, G.S. Falconieri, A. Pascale, F. Pennacchio, M. Lorito, S. Proietti, S.L. Woo* *University of Naples Federico II, Italy | University of Tuscia, Italy | Utrecht University, The Netherlands*	F-38
	Application of heat-treated Lysobacter capsici AZ78 cells and its polycyclic tetramate lactams effectively controls *Plasmopara viticola* by stimulating grapevine defence mechanisms *A.J. Dinesh Kothari, S. Nadalini, M. Masi, A. Cimmino, G. Puopolo* *University of Trento, Italy | Fondazione Edmund Mach, Italy | University of Naples Federico II, Italy*	F-39
	Metagenomics insight into rhizosphere microbial indicators of tomato health and disease resistance *A.O. Akanmu, A.A. Adedayo, O.O. Babalola* *North-West University, South Africa*	F-40

DAY 4 Conference Programme 14 June

09.30 - 10.30	Oral presentations	
	Effective control of wheat and barley diseases by *Bacillus velezensis* BE2 through direct antagonism and induced systemic resistance *E. Dutilloy, A. Argüelles Arias, J.F. Guise, S. Selim, P. Jacques, C. Jacquard, C. Clément, E. Ait Barka, Q. Esmaeel* *Université de Reims Champagne-Ardenne, France | University of Liège, Belgium | Institut Polytechnique UniLaSalle, France*	O-35
	Effect of a bacterial SynCom on the tomato microbiome and transcriptome under challenge by *Xanthomonas euvesicatoria* pv. *perforans* *D. Nicotra, A. Mosca, S. Ghosh, F. Ghadamgahi, G. Dimaria, R. Ortiz, R.R. Vetukuri, V. Catara* *University of Catania, Catania, Italy | Swedish University of Agricultural Sciences, Sweden*	O-36
	Elucidate the modes of action of biocontrol agents against *Sclerotinia sclerotiorum* on rapeseed *M. Grimonpont, E. Turc, A. Lies, N. Monnier, P. Nicot, M. Bardin* *INRAE, France | Groupe Elephant Vert, France*	O-37
	Biocontrol and its regulation of *Bacillus velezensis* against apple ring rot *Y. Li, Q. Wang, H. Gong, X. Chen, W. Jiang, Y. Yang, Y. Zhang* *China Agricultural University, China*	O-38
10.30 - 11.00	Coffee break	
11.00 - 13.00	**SESSION X - Commercial use of microbials for integrated and organic disease management** *Chairpersons: M. Bardin, R. Marra*	
11.00 - 11.30	Flash talks	
	Streptomyces spp. biocontrol activities emphasize the bioprospection significance on the development of new products *L.C. Ferraz Helene, M.P.P. De Souza, M. Borges Vieira, S. Marques Faria, L. Sostena Carvalho Silva, C. Alves Vogt, J. Barros Chiaramonte* *VITTIA S.A., Brazil*	F-42
	Efficacy and evolution of *Bacillus velezensis* BV02-based biofungicide in integrated coffee disease management *J. Brasau da Silva, P. de Freitas Silva, J. Barros Chiaramonte, H. Monteiro Ferro* *VITTIA S.A., Brazil*	F-44
11.30 - 13.00	Oral presentations	
	Selection of new microbial plant protection strains for EU markets: regulatory and manufacturing challenges *F. Cortés, F. Kamilova* *Le Carré Saint-Pierre, France | Agro Business Park 75, The Netherlands*	O-39

DAY 4 Conference Programme — 14 June

	Trichoderma-formulated products alternated or not impact in *Sclerotinia sclerotiorum* management considering the origins: laboratory and field borne sclerotia *R. Coelho Silva, R. Araújo Guimarães, B.A. Antonio de Sousa e Silva, L. Oliveira Reis, F.H. Vasconcelos de Medeiros* *Federal University of Lavras, Brazil*	O-40
	Advanced multifunctional biopolymer product for delayed ripening, enhanced postharvest disease control, and fruit quality preservation *M. Miranda, C. Casals, R. Torres, C. Solsona, C. Sanchez, N. Teixidó* *IRTA, Postharvest, Fruitcentre, Spain*	O-41
	Meyerozyma guilliermondii strain 2H13 – a strain without efficacy can have a great effect *C. Donat, S. Kunz* *e-nema GmbH, Germany | Bio-Protect GmbH, Germany*	O-42
	Microbial biocontrol agents: opportunities and barriers *H.J. Rees, M. Elliot, J. Drakulic, M.G. Cromey, H. Degiovanni, K. Maloney, H. Creissen, A.M. Bailey, G.D. Foster* *Lincoln University, NZ | Royal Botanic Garden, UK | Royal Horticultural Society, UK | Carbon Crop & Soils, SRUC, UK | SAC, Craibstone Estate, Ferguson Building, UK | University of Bristol, UK*	O-43
	Integrated biological-chemical interface for eco-friendly control of maize late wilt and cotton charcoal rot diseases *O. Degani, A. Gordani, E. Dimant, O. Rabinovitz* *Migal – Galilee Research Institute, Israel*	O-44
	Best poster and best flash talk awards delivered by T. Cernava, IOBC-WPRS Convenor	
13.00 - 13.15	Closing remarks	
13.15 - 14.00	Lunch	
14.00	Departure	

Poster Session

Potential of probiotics in the control of coffee leaf rust P-01
G. Peixoto de Freitas, F. R. A. Patricio, R. C. Vargas, W. Bettiol
Embrapa Meio Ambiente, Brazil. Instituto Biológico de São Paulo, Brazil

Exploring soil microbiomes for early detection of soilborne pathogens in tomato cultivation P-02
M. M. Aci, E. Francomano, V. Cianci, S. Mosca, M. G. L. D. Nicosia, L. Schena, A. Malacrinò
Università degli Studi Mediterranea di Reggio Calabria, Italy
Department of Biological Science, Clemson University, USA

Use of wild garlic volatile organic compounds to suppress the growth of soil-borne plant pathogenic fungi P-03
C. Papazlatani, J. Damming, W. de Boer, P. Garbeva
Netherlands Institute of Ecology (NIOO-KNAW), Wageningen, The Netherlands
Utrecht University of Applied Sciences, Institute for Life Sciences & Chemistry, Utrecht, the Netherlands
Soil Biology Group, Wageningen University & Research, Wageningen, The Netherlands

Erwinia amylovora specific bacteriophages distribution during the fire blight epidemic in central Serbia P-04
K. Gašić, N. Zlatković, M. Krivokapić, M. Šević, J. Adamović, A. Prokić, M. Ivanović, A. Obradović
Institute for Plant Protection and Environment, Belgrade, Serbia
University of Kragujevac, Čačak
Directorate for National Reference Laboratories, Belgrade
University of Belgrade, Belgrade, Serbia

Plant extract (PE2) for optimum efficacy of LALSTOP G46 WG, for the control of B. cinerea and Erysiphe necator on Grapes P-05
M. Morel, B. Delfour, S. L. Rogalska, B. Delaunois
Danstar Ferment AG / Lallemand Plant Care

Screening and Functional Characterization of Bacillus subtilis YJBS-26: A Salt-Alkali Tolerant and Plant Growth-Promoting Strain P-06
Screening and Functional Characterization of Bacillus subtilis YJBS-26: A Salt-Alkali Tolerant and Plant Growth-Promoting Strain
"1Inner Mongolia Academy of Agricultural and Animal Husbandry Sciences, Hohhot, China
2 Inner Mongolia Agricultural University, Hohhot, China"

Trichoderma-based bioformulation for biocontrol and biostimulation of forage crops P-07
D. Lotito, N. Musco, L. Izzo, A. Staropoli, V. Battaglia, E. Lahoz, M. Lorito, F. Vinale
University of Naples Federico II, Naples, Italy
Research Center for Cereal and Industrial Crops - Council for Agricultural Research and Economics (CREA-CI), Caserta, Italy

Metagenomic analysis of epiphytic microorganisms of broccoli with LED and UV-C treatments P-08
X. Xu, S. Yuan, X. Yue, Q. Wang
Beijing Academy of Agriculture and Forestry Sciences, Beijing, China

Ramularia mali and Dry Lenticel Rot in Apples: Preliminary Assessment of Storage Conditions and Their Effects on the Microbiome P-09
S. Primisser, D. Spadaro, S. Oettl
Laimburg Research Centre, Italy
University of Turin, Grugliasco, Italy

Poster Session

In Vitro Ecophysiological Insights into Apple Microbiome Biocontrol Agents Isolated from Mountain and Valley P-10
A. M. Sánchez, J. Oliva, C. Solsona, C. Casals, N. Teixidó
IRTA, Fruitcentre, Lleida, Spain
University of Lleida, Catalonia, Spain

Antagonistic effects of plant growth-promoting rhizobacteria consortium against the tomato wilt disease caused by *Clavibacter michiganensis* subsp. *michiganensis* P-11
S. Benchlih, R. Lahlali, D. Aggad, J.-F. Guise, K. Aberkani, E. Ait Barka, Q. Esmaeel
Université de Reims Champagne-Ardenne, France
Ecole Nationale d'Agriculture de Meknès, Morocco
University Mohammed Premier, Morocco
Université de Reims Champagne-Ardenne, France

Antagonistic Interactions between Maize Seeds Microbiome Species and the Late Wilt Disease Agent, *Magnaporthiopsis maydis* P-12
O. Degani, A. Ayoub, E. Dimant, A. Gordani
Galilee Research Institute, Tarshish, Israel / Faculty of Sciences, Israel

Exploring the possibility of incorporating *Ganoderma* biomass to improve the efficacy of *Scytalidium parasiticum* and *Clonostachys rosea* in reducing basal stem rot (BSR) disease P-13
X. Z. Oong, N. F. Marzuki, Y. K. Goh, Y. K. Goh, M. T. Nazir
Advanced Agriecological Research, Malaysia

First biological control tests of *Neopestalotiopsis clavispora* in Costa Rica P-14
J. A. Calvo-Araya, A. Arroyo-Vargas, A. Arroyo-Vargas
Universidad Nacional, Costa Rica

Impact of BVOCs from *Lysinibacillus fusiformis* and LED irradiation on pigment metabolism in stored broccoli P-15
Qing Wang, Shuzhi Yuan, Xiaozhen Yue, Xiaodi Xu
Beijing Academy of Agriculture and Forestry Sciences, Beijing, China

On the Hunt – Identifying endophytic bacteria against Apple Proliferation Disease P-16
L. Galtarossa, A. Fine, M. Trenti, E. Corretto, M. Moser, H. Schuler, K. Janik
Laimburg Research Centre, Italy
Provincia Autonoma di Trento, Italy
Free University of Bozen-Bolzano, Italy
Fondazione Edmund Mach, Research and Innovation Centre, Italy

Control Strategies Combining Calcium Oxide and Biochar for Effective Management of *Phytophthora nicotianae* in Tomato P-17
C. Roperto, G. Padovan, M. Pugliese
University of Torino, Italy
University of Torino / AgriNewTech srl, Torino, Italy

Poster Session

Characterization of *Stemphylium vesicarium* isolates from pear orchards in Emilia Romagna (Italy) and assessment of potential microbial biocontrol agents P-18

A. Montorsi, M. Cortiello, F. Bellameche, M. Menghini, C. Nasuti, F. Modica, R. Baroncelli, M. Collina, L. Solieri, E. Stefani, D. Giovanardi
University of Modena and Reggio Emilia, Italy
University of Bologna, Italy
University of Catania, Italy

Grapevine endosphere as a source of potential novel biocontrol agents of grapevine trunk disease pathogens P-19

A. Manzoni, G. Dardani, D. Spadaro, V. Guarnaccia
University of Torino, Grugliasco, Italy

Integrating Hot Water Treatment and Biocontrol Agents: Impacts on Grapevine Trunk Diseases and Wood Microbiome Dynamics P-20

F. Aloi, G. Dardani, M. Garello, D. Spadaro, V. Guarnaccia
University of Turin, Grugliasco (TO), Italy

Assessment of Biological Products as Promising Solutions Against Apple Bitter Rot and Glomerella Leaf Spot in Apple Orchards P-21

M. Calì, E. Cappelletti, M. Landi, M. Preti, R. Bugiani, R. Baroncelli, A. Prodi
University of Bologna, Bologna, Italy
Astra Innovazione e Sviluppo, Faenza, Italy
Phytosanitary Service of the Emilia-Romagna Region, Bologna, Italy

Biological control of black rot (*Guignardia bidwellii*) with microbial antagonists in fungal resistant grapevine cultivars P-22

J. Müller, D. Landwermeyer, J. Renaud, L. Muskat
Hochschule Geisenheim University, Geisenheim, Germany

Kosakonia cowanii SH2 and Its Application in Growth Promotion, Enhancing Resistance of Drought and Root Rot in Soybean P-23

Y. Zhao, C. Zhang, Y. Zhang, D. Wang
Inner Mongolia Academy of Agricultural and Animal Husbandry Sciences, Hohhot, China
Inner Mongolia Agricultural University, Hohhot, China

Developing a systems approach for the control of pear scab – how to implement biocontrol? P-24

M. van Driel, K. Kots, M. Wenneker
Wageningen University & Research, Business Unit Field Crops, the Netherlands

Streptomyces strains as biocontrol agents against fungal soilborne pathogens P-25

A. Carlucci, T. Conte, M. G. Morea, G. Ricciardi, M. L. Raimondo, F. Lops
University of Foggia, Italy

Influence of The Biofungicide, Esquive® Wp, On Grapevine Wood microbial Communities after a 6-Year Period of Applications P-26

A. Yacoub, D. Renault, R. Haidar, F. Boulisset, P. Letousey, R. Guyoneaud, E. Attard, P. Rey
Université de Pau et des Pays de l’Adour, Pau, France
INRAE, UMR1065 Santé et Agroécologie du Vignoble (SAVE), Villenave d’Ornon, France
Agrauxine by Lesaffre,Beaucouzé, France

Poster Session

Trichoderma asperellum as a potential biocontrol agent to reduce the level of *Geotrichum candidum* inoculum on stone fruit orchards soil P-27

J. Borràs-Bisa, C. Casals, J. Usall, N. Teixidó, G. Segarra, E. Zúñiga
IRTA, Catalonia, Spain
University of Barcelona, Spain

Development of a plant protection agent based on an isolate of the bacterial organism *Lysobacter enzymogenes* P-28

J. Maier, K. Yubonphan, S. Kunz, A. Peters, M. Touceda, Y. Rondot, A. Reineke, S. Weißhaupt, A. Linkies
Julius Kühn Institute (JKI), Federal Research Centre for Cultivated Plants, Institute for Biological Control, Dossenheim, Germany
Hochschule Geisenheim University (HGU), Department of Crop Protection, Geisenheim, Germany
Bio-Protect GmbH, Konstanz, Germany
e-nema GmbH, Schwentinental, Germany

Development of the microbial antagonist *Lysobacter enzymogenes* as a plant protection product for soil application against *Pythium ultimum* in cucumber P-29

A. Walter, L. Muskat, Y. Rondot
Hochschule Geisenheim University, Department of Crop Protection, Geisenheim, Germany

Functional characterization and metabolomic analysis of *Salvia* spp. extracts to control grapevine downy mildew P-30

Anna Smaldone, Stefano Micheloni, Oscar Giovannini, Michael Oberhuber, Peter Robatscher, Michele Perazzolli
University of Trento, Italy

Microbial Allies for sustainable viticulture: The Case of *Pseudomonas* sp. 714A P-31

Elia Soriato, Davide Danzi, Giulia Lancia, Giorgia Grasso, Chiara Tezza, F. Spinelli, M.C. Santos, Elodie Vandelle
Dipartimento di Biotecnologie, Università degli Studi di Verona. Dipartimento di Scienze e Tecnologie Agro-Alimentari, Università di Bologna. Department of Biology, LAQV-REQUIMTE, Faculty of Sciences, University of Porto, Porto, Portugal.

Endogenous *Trichoderma* strains from vineyard rhizosphere: a step toward eco-friendly viticulture practices P-32

Elia Soriato, Davide Danzi, Martina Casagrande, Cristian Zanasi, F. Spinelli, M.C. Santos, Elodie Vandelle
Dipartimento di Biotecnologie, Università degli Studi di Verona. Dipartimento di Scienze e Tecnologie Agro-Alimentari, Università di Bologna. Department of Biology, LAQV-REQUIMTE, Faculty of Sciences, University of Porto, Portugal.

Inhibitory effect in vitro and action mechanism of Piper divortans Trel. & Yunck. metabolites on the Fusarium spp in banana crops P-33

Janneth Liliana Peláez Villegas, Ana María Mesa Vanegas, Zulma Isabel Monsalve
Faculty of Exact and Natural Sciences, Institute of chemistry, Institute of biology, Agrobiotechnology rearch group. University of Antioquia. Medellín, Colombia

Preliminary assessment of the usefulness of magnesium hydroxide and selected yeast strains for protecting potatoes against potato blight in organic farming systems P-34

J. Kowalska, J. Krzymińska
Institute of Plant Protection – National Research Institute, Poznan, Poland

Poster Session

Antibacterial activity in vitro and possible mechanism of soulatrolide and derivates against *Ralstonia Solanacearum* in banana crops P-35
Ana María Mesa Vanegas, Janneth Liliana Peláez Villegas, Zulma Monsalve
Faculty of Exact and Natural Sciences, Institute of chemistry, Institute of biology, Agrobiotechnology research group. University of Antioquia. Medellín, Colombia

Comparative Metagenomic Analysis of Plant Pathogenic Microorganisms in Drainage Water from Greenhouse of Paprika, Tomato and Strawberry in South Korea P-36
Miah Bae, Sangyeon Ju, Byungyeon Kim, and Mi-Ri Park
Division of Region-Specific Industries Fostering, Cheorwon Plasma Research Institute, Korea

How can the use of biocontrol agents be improved to manage gray mold in vineyards? P-45
G. Fedele, I. Salotti, V. Rossi, T. Caffi
Università Cattolica del Sacro Cuore, Piacenza, Italy

The effect of bacterial volatile organic compounds with light-emitting diode lighting on antioxidant capacity in stored broccoli P-46
Xiaozhen Yue, Qing Wang, Shuzhi Yuan, Xiaodi Xu
Key Laboratory of Vegetable Postharvest Processing, Ministry of Agriculture and Rural Affairs, Beijing Key Laboratory of Fruits and Vegetable Storage and Processing, Institute of Agri-food Processing and Nutrition, Beijing Academy of Agriculture and Forestry Sciences, Beijing, China

Enhancing tomato defense mechanisms: modulation of long non-coding RNAs in response to foliar application of the biocontrol agent *Streptomyces* sp. DLS2013 P-40
S. Cassanelli, F. Bellameche, F. Caradonia, M. Cortiello, D. Giovanardi
Department of Life Sciences, University of Modena and Reggio Emilia, Reggio Emilia, Italy

Synergistic effects of arbuscular mycorrhizal fungi and a rapid root colonizing fungus against Fusarium wilt in tomato P-41
A. M. Hallasgo, S. Kochmann, A. Urbanetz, G. Hermann, C. Hauser, S. Böhmdorfer, S. Hann, S. Steinkellner, K. Hage-Ahmed
BOKU University, Institute of Plant Protection, Tulln, Austria
BOKU University, Institute of Analytical Chemistry, Vienna, Austria
BOKU University, Core Facility Mass Spectrometry, Vienna, Austria
BOKU University, Institute of Chemistry and Renewable Resources, Tulln, Austria

Chitosan/mandarin essential oil-based films on citrus fruits to prevent the occurrence of grey and blue mould in post-harvest and to control the medfly attack P-47
P. Parichanon, P. Farina, S. Sarrocco, B. Conti
Department of Agriculture, Food and Environment, University of Pisa, Italy

Hop-associated bacteria with growth-promoting traits and antifungal activities: a sustainable solution for Italian hop farms P-37
F. Modica, F. Bellameche, M. Cortiello, L. Prodi, E. Costi, C. Riccioni, F. De Marchis, A. Rubini, L. Brilli, F. De Canio, E. Stefani, E. N. Carmona, D. Giovanardi
University of Catania, Italy
University of Modena and Reggio Emilia, Italy

Poster Session

Foliar application of *Microfighter* activates defense genes in grapevine: a preventive strategy against potential diseases. P-42
F. Bellameche, F. Modica, L. Fagioli, D. Giovanardi, E. Stefani
University of Modena and Reggio Emilia, Italy
University of Catania, Catania, Italy
Consorzio Agrario di Ravenna, Cotignola, Italy

Root exudates from stressed plants influence rhizosphere inter-kingdom interactions P-43
N. Lombardi, S. Vitale, R. Marra, D. Turrà, I. Di Lelio, F. Pennacchio, G. Diretto, M. Lorito, S. L. Woo
University of Naples Federico II, Portici, Italy
ENEA – Casaccia Research Centre, Rome, Italy
University of Naples Federico II, Naples, Italy

Microbial volatile organic compound dynamics in solid-state fermentation: evaluation of antifungal activity P-38
L. Pisoni, F. Araniti, M. Saracchi, C. Pizzatti, A. Kunova, P. Cortesi, M. Pasquali, D. Bulgari
University of Milan, Italy

Enhancing pigment production in bacterial biocontrol agents to improve UV radiation tolerance P-39
A. Martini, M. Cesarini, G. Puopolo
University of Trento, Italy
Fondazione Edmund Mach, San Michele all'Adige, Italy

Building microbial consortia towards saprofict stubble colonization and reduction of *Rizoctonia solani* severity in common bean P-44
J. M. Chanta Agurto, L. Oliveira Reis, R. A. Guimarães, R. C. Silva, F. H. V. de Medeiros
Universidade Federal de Lavras, Brazil

Use of Vacciplant® in the control of grey mold (*Botrytis cinerea*) and its performance in strawberry shelf life P-48
L. M. O. Costa, B. A. A. de Sousa e Silva, T. S. Moreira, R. C. Silva, F. H. V. de Medeiros
Federal University of Lavras, Brazil

Next-generation antimicrobials: biological synthesis of AgNPs coated with beneficial bacterial metabolites as biocontrol agents P-49
Svitlana Arslan, Elena Fuente-González, Enrique Gutierrez-Albanchez, Francisco Javier Gutierrez-Mañero and Beatriz Ramos Solano
University San Pablo-CEU, Faculty of Pharmacy, Madrid, Spain; Institute of Food Biotechnology and Genomics NAS of Ukraine, Kyiv, Ukraine

Upscaling efficient alternatives for contentious inputs in organic farming – the recently funded EU-project "SCALE-it" P-50
A. Schmitt, A. Linkies, V. Verrastro, V. Mazzoni, I. Pertot, M. Perazzolli, E. Kabourakis, H.-J. Schärer, V. Maurer
JKI, Institute for Biological Control, Dossenheim, Germany
IAMB, Valenzano, Italy
FEM, Research and Innovation Centre, Italy
UNITN, Center Agriculture Food Environment, Italy
HMU, Heraklion, Greece
FIBL, Department of Crop Sciences, Department of Livestock Sciences, Switzerlandi

INSTRUCTIONS FOR PRESENTERS

Oral presentations

Please, prepare a power point presentation to be delivered to the technical assistance the day before the presentation or at the beginning of the morning. The presentation should last 12 minutes. Three more minutes will be dedicated to questions and answers.
Please, identify the file with the id number assigned to your presentation followed by your surname, as reported in the programme (e.g. O-01_Spadaro).

Flash talk presentations

Please, prepare a power point presentation to be delivered to the technical assistance the day before the presentation or at the beginning of the morning. The presentation should last 3 minutes. Two more minutes will be dedicated to discussion.
Please, identify the file with the id number assigned to your presentation followed by your surname, as reported in the programme (e.g. F-01_Spadaro).
All the flash talks will participate to the “Best Flash Talk Award” contest. The awards will be delivered on Saturday 14 June. All the participants will be asked to vote for their preferred flash talks.

Poster preparation

Posters will be displayed on three totems present at the congress venue and can be visualized on the web page of the congress

All the posters will participate to the “Best Poster Award” contest. The awards will be delivered on Saturday 14 June. All the participants will be asked to vote for their preferred posters.

Questions

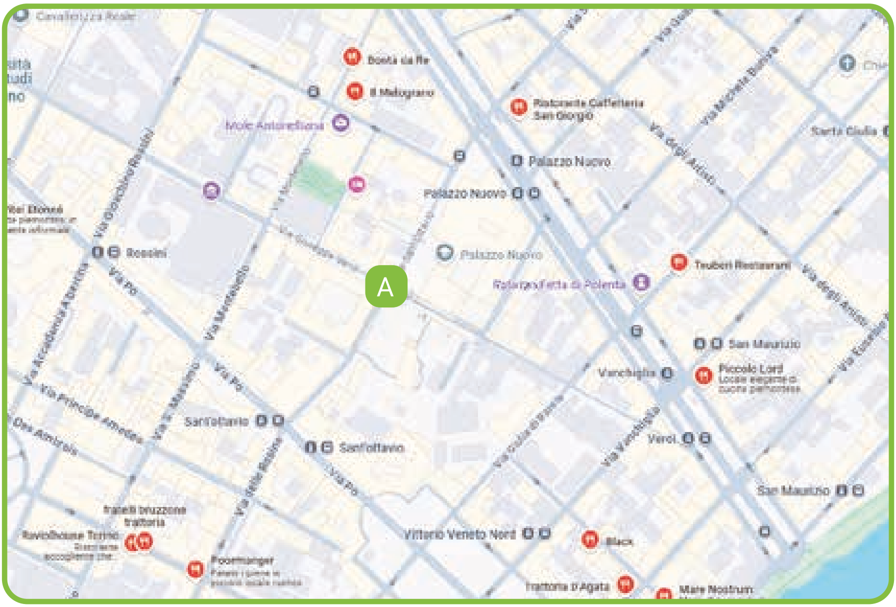
Questions can be posed by using the microphone or by writing a whatsapp message on the number available at the following:

WhatsApp

WiFi: IOBC-WPRS

A Congress venue and Meeting point for technical visit

Complesso Aldo Moro
Università degli Studi di Torino
Via Verdi, 10123 Torino



How to reach Torino

Torino can be reached from the Airport of Caselle Torinese (called Sandro Pertini airport) with public transport:

• by train from Torino Aeroporto to Torino Porta Susa railway station
• by bus from Caselle Torinese, Str. Aeroporto, to Torino Porta Nuova railway station

From Porta Susa railway station, the city center can be reached by tram n. 13 towards Piazza Gran Madre, whereas from Porta Nuova, by bus 68 towards via Cafasso.
From Porta Nuova railway station the congress venue and downtown hotels are at a walkable distance (about 20 minutes).

Sustainability

As conference organizers, we knew since the conference organization beginning that our task extended beyond creating an interesting scientific event. We are aware of the impact that international events have on the environment and **the social and environmental responsibility** that they involve.

All over the world, sustainability in events has become **a paramount concern** and the rising trend of incorporating sustainable measures into event planning is the answer to this concern and a commitment to reduce the ecological impact while maximizing the benefits.
With this in mind, we have been working for a **green-oriented event**, trying to adopt all possible best practices to respect and contribute positively to environment, society, and economy.

Main goals have included **economic sustainaibility** by prioritising local vendors to support local economy and community, **environmental sustainability** by reducing as much as possible the event ecological footprint and, last but not least, **social sustainability** by ensuring a safe and inclusive environment for all attendees.

More information can be found on the conference website

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iobctorino2025.org

Organizing Secretariat

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