Di3A
Dipartimento di Agricoltura, Alimentazione e Ambiente

With the patronage of
Società di Ortoflorofrutticoltura Italiana

ITAKA crop solution

International Workshop

BIOCONTROL AGENTS AND NATURAL COMPOUNDS: IMPORTANT TOOLS FOR ORGANIC VEGETABLE FOOD SUPPLY CHAINS

13 March 2020

Dipartimento DI3A
Via Valdisavioia 5, Catania
Aula Magna «A. Jannaccone»

The workshop aims to provide to the students, technicians and growers the recent research projects outcomes related to the biocontrol agents (BCAs) and natural compounds (NCs) which could be useful for improving the crop performance and for reducing chemical inputs in the growing processes and chemical residuals in the agriculture products. The BCAs and NCs could improve the resilience, the efficiency and the sustainability of the growing systems, both organic and conventional, and they could represent new tools for supporting a new vision of the environmentally friendly farming.

PROGRAMME

8.45 Registration

9.00 Welcome
Agatino Russo- Direttore Di3A

9.15 Beneficial Soil Microorganisms as Plant Biostimulant
Ricardo Aroca Álvarez – CSIC EEZ Granada

9.35 Plant extracts and their potential use as biostimulants
Antonio Ferrante – University of Milan

9.55 Challenges for survival of seed applied biologicals
Groot Steven - Wageningen University & Research

10.15 Biocontrol agents applied by fertigation and seed coating for controlling tomato and potato diseases
Walid Hamada - Institute National Agronomique de Tunisie

10.35 Glucosinolate compounds for controlling soil pests and diseases
Sergio Argento - National Research Council, CNR ISAFOM

10.55 Coffee break

11.15 New perspective for the vegetable production with zero chemical residues
Vincent Lefebvre du Prey – ITAKA Crop Solution

11.35 Beneficial bacteria communities from the tomato seed and root environment
Vittoria Catara - University of Catania

11.55 The H2020 Organic Plus project: patway to phase-out contentious inputs in organic agriculture for citrus, olive, potato and tomato
Gabriella Cirvilleri – University of Catania

12.15 The H2020 «BRESOV project» for improving organic farming techniques for broccoli, snap bean and tomato
Ferdinando Branca - University of Catania

12.35 Round table and Conclusions

For more information and pre-registration please contact: bresovunict@gmail.com
0,25 CFUs are provided for the Di3A students

The BRESOV project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 774244.

BRESOV

Di3A
Dipartimento di Agricoltura, Alimentazione e Ambiente

With the patronage of
Società di Ortoflorofrutticoltura Italiana

ITAKA crop solution

International Workshop

BIOCONTROL AGENTS AND NATURAL COMPOUNDS: IMPORTANT TOOLS FOR ORGANIC VEGETABLE FOOD SUPPLY CHAINS

KEYNOTE SPEAKERS

Ricardo Aroca Álvarez – CSIC EEZ Granada

Ricardo Aroca got a Ph. D. in the Department of Plant Physiology of the University of Navarra (Spain) in 2001 studying chilling effects on maize plants. Thereafter he moved to University of California San Diego to work with Prof. Maarten J Chrispeels studying the response of aquaporins to different abiotic factors. In 2005 he moved to Estación Experimental del Zaidín (CSIC) where until now he is studying how different soil microorganisms modify plant water relations. Since 2007 he has a permanent position as Scientific Researcher. He published around 90 scientific papers and he is editor of Plant and Soil and International Journal of Molecular Sciences. His main research areas are: Hormonal and Abiotic Stress Regulation of Root Water Uptake, Plant Growth Promoting Rhizobacteria enhances Abiotic Stress Tolerance, Water Relations of Mycorrhizal Plants

Antonio Ferrante – University of Milan

Associate Professor at University of Milan, Italy, since 2016. He graduated from the University of Pisa, Pisa, Italy, in agricultural science, 110/110 cum laude (first-class honors) in 1997. He earned the Ph.D. degree in advanced technology in horticultural science at the Scuola Superiore Sant'Anna, Pisa in 2001, with 100/100 cum laude. In 2000, he spent one year abroad as a Visitor Researcher at the Department of Environmental Horticulture, University of California, Davis, CA, USA, in the Professor M. S. Reid's laboratory. He has been researcher/assistant professor at the University of Milano. His research topics are related on mineral nutrition and abiotic stresses tolerance on crops cultivated in greenhouse or open field. His research topics focus on eco-physiology, biochemistry, transcriptional changes, and quality evaluation on crops grown under different stress conditions. He is author or co-author of more than 200 international publications in peer-reviewed journals, 133 indexed in Scopus.

Groot Steven - Wageningen University & Research

Dr. Steven Groot is seed biologist working in the Netherlands at Wageningen University & Research. Next to the variety characteristics, for farmers seed quality is increasing in importance in the choice of seeds. The Netherlands is the worldwide the largest exporter of vegetable and flower seeds. To support this, Wageningen Seed centre performs fundamental research to understand aspects of seed quality, develops innovative approaches to improve seed quality and trains students and company staff. Steven is involved in seed research for more than 30 years. One of his main topics is seeds for organic farming and as such he participates in the EU LIVESEED project. Other topics are seed vigour, seed dormancy and improving shelf life of seeds. He is co-founder of the International Seed Academy to provide training on seed technology, mainly in Asia.

Walid Hamada - Institute National Agronomique de Tunisie

After obtaining a PhD in molecular plant pathology at the National Agronomic Institute of Paris, much of his experience was in the plant production and protection field through positions in different research institutes and universities. Indeed, this started with the work achieved as post doc researcher in Oxford University for the characterization of molecular determinants of the pathogenicity of the fungi. During the postdoctoral position at the Ohio State University, his research program was focused on the identification of resistance genes in plants to fungal disease. Currently as Professor at the National Agronomic Institute of Tunisia, he is giving lectures in biotechnology and plant-microbe interactions. He is involved in different committees with the Tunisian Ministry of Agriculture for the survey of emerging diseases, plant protection building capacities and its upgrade as well as the registration of biopesticides and the introduction of plant species.

The BRESOV project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 774244.

BRESOV

Di3A
Dipartimento di Agricoltura, Alimentazione e Ambiente

With the patronage of
Società di Ortoflorofrutticoltura Italiana

ITAKA crop solution

Sergio Argento - National Research Council, CNR ISAFOM

His scientific activity is focused on: characterisation, evaluation and breeding of cauliflower landraces of high quality for nutrition (bioactive compounds) for biotic pest and disease control (biofumigation); plant-environmental interactions, exploitation of wild and cultivated germplasm of interest for innovation vegetables and medicinal plants production, innovation of greenhouse production. Evaluation and improvement of field production for the contain of bioactive compounds and its exploitation for controlling human and crop disease. Exploitation of Italian vegetable germplasm.

Vincent Lefebvre du Prey – ITAKA Crop Solution

Vincent Lefebvre du Prey is ITAKA's Head of Marketing, co-ordinating R&D and relation to markets. Itaka is specialized in innovative solutions based on natural components, making it essential to co-operate with research institutes, to be involved in global projects and provide markets with information on new tools for agriculture.
Vincent has a long experience in plant protection from leading global companies, completed by 10 years work in development of alternative solutions such as microorganisms and plant extracts. Itaka is today participant to the Bresov project, and provides microorganisms for soil and seed treatment. Itaka offers markets solutions to improve soil health, increase natural resistance to pests and build plant resilience.

Vittoria Catara - University of Catania

PhD, Associate Professor in Plant Pathology since 2006 at the Department of Agriculture, Food and Environment (Di3A), University of Catania (UniCT). Since 1990 she joined the research activity of the Plant pathology group at UniCT where lead a research group involved in phytobacteriology. Her research activity focused on: molecular diagnosis; phenotypic and genomic characterization of plant pathogenic and beneficial bacteria; plant resistance; characterization of beneficial plant pathogenic bacteria; molecular plant bacteria interaction and genomics. Main crops of interest are: tomato, brassicas, citrus, olive, pear. Present appointments: Vice-Chair COST 16170 EuroXanth, Integrating science on Xanthomonadaceae for integrated plant disease management in Europe (2017- 2021); Head of the Master degree in "Agricultural Biotechnology", Di3A, UniCT, Italy (2016 -); Senior Editor of Australasian Plant Disease notes, Springer (2018 -); Associate Editor of European Journal of Plant Pathology, Springer (2013 -).

Gabriella Cirvilleri – University of Catania

Gabriella Cirvilleri is full professor of Plant Pathology at the Department of Agriculture, Food and Environment (Di3A) of Catania, Italy. Graduated in Agricultural Sciences in 1984, she received a Ph.D. in Plant Pathology from the University of Catania in 1989, and she was research fellow at the Department of Plant and Microbial Biology, Berkeley, California in 1989, 1992 and 1997. She has been Coordinator of the Degree Course "Agricultural Science and Technology" and Coordinator of the Ph.D. course "Phytosanitary technologies and defence of agroecosystems" at the University of Catania. She is currently Member of the National Scientific Qualification Commission (ASN) for the competition sector 07/D1 - Plant Pathology and Entomology. Current research mainly focuses on the mode of action of bacteria and yeast biocontrol agents and on the evaluation and use of alternative control methods against diseases of fruit and vegetables caused by fungal and bacterial pathogens.

Ferdinando Branca - University of Catania

In 1991 was declared Ph doctor on "Crop Productivity" and from 2010 he is associated professor of Catania University where he has studied aspects related to diversification and innovation of vegetable production by studying the variation of plant bio-morphology, primary and secondary metabolites and genetic profiles of landraces and of crop wild relatives, species neglected or underutilized. During his PhD studies he pointed particular attention on "Optimization of protected cultivation by introduction new crops or by modifying some growing techniques". He is actually coordinator of the H2020 BRESOV (Breeding for Resilient, Efficient and Sustainable Organic Vegetable production), the Italian representative of the Brassica Working Group and member of the Vegetable Network Group of the European Cooperative Program on Genetic Resources.

The BRESOV project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 774244.

BRESOV