

## ORAL PROGRAMME

### Keynote speeches

- 1. Aspects of circularity; recirculation, more circular fertilizer concepts and control over resilience in time**  
*Chris Blok, Wouter Verkerke, Alexander Boedijn*
- 2. Biological indicators and compost for managing plant disease**  
*Deborah Neher*
- 3. Mysteries and musings at the biochar/plant/stress/growing media interface**  
*Ellen Graber*
- 4. Biochar as an additive in composting: Impact on process performance and on the agronomical quality of the end product**  
*Miguel A. Sánchez-Monedero, María Sánchez-García, Raúl Castejón-Del Pino, Fernando Fornes, Rosa M. Belda, Antonio Lidón, María Luz Cayuela*
- 5. Use of compost in nursery as pre-planting substrate to control soil-borne pathogens on vegetable crops in field conditions**  
*Massimo Pugliese*

### Session - Growing media and sustainable use of resources

- 6. Wood fibre to replace peat as pot plant substrate**  
*Barbara Eveleens-Clark, Chris Blok, Aat van Winkel*
- 7. Effect of recycled Phosphorus and nitrogen fertilizers on the Growth and Quality of Viola (Viola cornuta L.)**  
*Ana Robles-Aquilar, Oliver Grunert, Erik Meers, Nicolai D. Jablonowski*
- 8. Performance of cucumber (Cucumis sativus), sweet pepper (Capsicum annum), and tomato (Solanum lycopersicon) in various local growing media, as alternative for rockwool in Saudi-Arabia**  
*Wim Voogt, Mohammed Almuwalid, Saif AlSahly, Jouke Campen, Hessel van der Heide, Mohammed Ewis Abdelaziz, Mohammed Osman, Ilias Tsafaras, Muyen Qaryouti, Feije de Zwart*
- 9. Testing peat-free growing media based on olive wood residue for olive saplings (Olea europaea L., cv. Gemlik)**  
*Alev Kir, Anne Kristin Loes, Barbaros Cetinel, Hatice Sevim Turan, Erol Aydogdu, Ralf Pecenka, Christian Dittrich, Rafaela Caceres, Margi L Turner, Francis Rayns, Judith Conroy, Ulrich Schmutz*
- 10. Primary mechanical modification to improve performance of Miscanthus as stand-alone growing media**  
*Van Nguyen, Thorsten Kraska, Winona Winkler, Sercan Aydinlik, Ralf Pude*

- 11. Experimental design as a framework for optimising polyurethane foam as a soilless growing media**  
*Harry Wright, Duncan Cameron, Anthony Ryan*
- 12. Replacement of peat by coir in *Ranunculus asiaticus* grown under different fertigation regimes and non-thermal plasma treatment**  
*Sonia Cacini, Samantha Cannazzaro, Sara Di Lonardo, Pane Catello, Silvia Traversari, Daniele Massa*
- 13. Soilless Substrate Science: A North American needs assessment to steer soilless substrate research into the future**  
*Jeb Fields, Jim Owen, Alexa Lamm, James Altland, Brian Jackson, Youbin Zheng, Loren Oki, Kathryn Fontenot, Jayesh Samtani, Benjamin Campbell*
- 14. Developing plant bioassays to evaluate the performance of sustainable growing medium**  
*Thayna Mendanha, Rong Zhou, Karen Koefoe Petersen, Sren Ugilt Larsen, Aidan Mark Smith, Carl-Otto Ottosen*
- 15. Waste materials-based substrates for ornamental plant production: technical and environmental aspects**  
*Francesco Paolo Nicese, Paola Arfaioli, Lapo Azzini, Alessandra Cincinelli, Monika Hermánková, Stefano Lucchetti, Cristina Macci, Grazia Masciandaro, Roberto Scodellini, Giancarlo Renella, Karel Waska*
- 16. Agricultural wastes as growing media improve growth parameters of pothos (*Scindapsus aureus*)**  
*Raheleh Ebrahimi, Masoud Saremizadeh, Maryam Marashi*
- 17. Progress on the social responsibility journey of the Canadian horticultural peat industry**  
*Stéphanie Boudreau, Marie-Claire LeBlanc, Paul Short*
- 18. Production of basil (*Ocimum basilicum* L.) in wood fiber-based substrates as affected by nutrient solution EC and pot size in ebb-and-flow hydroponic system**  
*Krzysztof Kusnierek, Tomasz Woznicki, Anita Snsteby, Mette Thomsen*

## Session: The microbiome of growing media and integrated disease and pest control

- 19. The interaction induced response next to changes in activity and community composition provide a comprehensive understanding of the resilience of microorganisms after peat mining**  
*Oliver Grunert, Thomas Kaupper, Monica Harnisz, Marcus A. Horn, Adrian Ho*
- 20. Influence of the application of mycorrhizal fungi and *Bacillus amyloliquefaciens* on the yields of three vegetables and a grass with organic fertilization on peat-free growing media in organic plant production**  
*Frank Eulenstein, Uwe Schindler, Julian Ahlborn, Joana Bergmann*

**21. Understanding the shift in the microbiome of composts that are optimized for a better fit in growing media**

*Steffi Pot, Caroline De Tender, Sarah Ommeslag, Ilse Delcour, Johan Ceusters, Ellen Gorrens, Jane Debode, Bart Vandecasteele, Karen Vancampenhout*

**22. Human pathogens in growing media as a critical quality parameter**

*Pekka Järvenpää*

**23. Microbially managed growing media: future sustainable growing media development route with decreased environmental footprint**

*Pekka Järvenpää, Oliver Grunert*

**24. Beneficial Microbes for improving circularity and yield in Hydroponic Crop Cultivation**

*Danny Geelen, Brechtje De Haas, Thijs Van Gerrewey, Maaïke Perneel, Marie-Christine Van Labeke*

**25. Microbe\*Plant Growing Media Interactions Modulate the Effectiveness of Bacterial Amendments on Lettuce Performance Inside a Plant Factory with Artificial Lighting**

*Thijs Vangerwey, Danny Geelen, Jeroen De Zwaeytijd, Oscar Navarrette, Maarten Vandecruys, Maaïke Perneel, Marie-Christine Van Labeke, Nico Boon*

**Session: Soilless cultivation: added value of innovations for water and nutrient use efficiency**

**26. Root oxygen use as a measure for ion uptake from slightly different nutrient solutions**

*Nina Oud, Tommaso Barbagli, Chris Blok*

**27. Effect of sample preparation on the air and water capacity of growing media**

*Uwe Schindler, Frank Eulenstein*

**28. Effect of reducing phosphorus dosage in nutrient solution on soilless culture of grafted tomato crops**

*Minh Ngoc Nguyen, Kazue Inaba, Seitaro Toda, Kuninori Suzuki, Yasunaga Iwasaki, Kotaro Takayama*

**29. The sodium tolerance of tomatoes revisited, to minimize nutrient emissions in closed-loop soilless systems**

*Tommaso Barbagli, Nina Oud, Andrea Diaz Ismael, Romain Leyh, Wim Voogt, Li Bo*

**30. Fen plant biomass as growing media constituent - reduction of nitrogen immobilization by composting**

*Christina Hartung, Elke Meinken*

**31. Use of new soilless growing media with attention for nutrient balance**

*Ine Geuijen, Hans Verhagen*

**32. Using organic fertilizers in growing media for young plant production**

*Hans Verhagen*

- 33. New tools for particle size and shape analysis of substrates components: first results and future prospects**  
*Jean-Charles Michel, Stan Durand, Brian E. Jackson, Paul C. Bartley, William V. Fonteno*
- 34. Analyzing rehydration efficiency of wood fiber addition in peat-based substrates using different irrigation methods**  
*Stan Durand, Brian E. Jackson, William V. Fonteno, Jean-Charles Michel*
- 35. Response of cucumber plants to oxygen-enriched nutrient solution under different greenhouse environments**  
*Poonam Singh*
- 36. Measuring Capillary Water Uptake and Retention in Substrates Through Subirrigation - A Methodology**  
*Brian Schulker, Brian Jackson, William Fonteno*
- 37. Automatic control of nutrient supply in a closed-loop hydroponic crop of cucumber using an innovative software in conjunction with ion selective electrodes to monitor the composition of the recycled drainage solution**  
*Dimitrios Savvas, Ioannis Panagiotakis, Achilleas Anastasiou, Stefanos Drakatos, Nikolaos Moutevelis, Georgia Ntatsi*

## Session: Biochar and compost in horticulture and carbon storage potential

- 38. A preliminary study on the synthesis and characterization of novel biochar-based fertilizers**  
*Raúl Castejón-del Pino, María L. Cayuela, María Sánchez-García, Miguel A. Sánchez-Monedero*
- 39. Positive effects of compost and management residues in growing media for ornamental plant cultivation**  
*Treza Cordaro, Steffi Pot, Ilse Delcour, Jesse Tavernier, Jane Debode, Fien Amery, Bart Vandecasteele, Karen Vancampenhout*
- 40. Critical Review of Chemical properties of Biochar Pertaining to its use as a Component of a Growing Media**  
*Munoo Prasad*
- 41. Management residues as alternative for farm yard manure: effects on nutrients, carbon and disease suppression**  
*Fien Amery, Bart Vandecasteele, Ilse Delcour, Steffi Pot, Treza Cordaro, Jane Debode, Jesse Tavernier, Karen Vancampenhout*
- 42. About time: temporal dynamics of the soil microbiome in compost and biochar treated agricultural soil**  
*Lisa Joos, Caroline De Tender, Sarah Ommeslag, Wouter Asselberg, Lieven Clement, Jane Debode, Bart Vandecasteele*

## Nomenclature workshop

- 43. Glossary of terms and basic growing media characteristics to be reported in scientific publications**

*Jean Caron, Youbin Zheng*

## Horti-BlueC Open Event

- 44. Biochar and chitin amendments for tomato substrates in commercial production ' evaluation of the potential to enhance growing media sustainability**

*Ewan Gage, Dave Kate, Barry Mulholland*

- 45. A commercial tomato greenhouse trial cultivated on organic sustainable growing media**

*Julie Moelants, Lotte Similon, Lien Bosmans, Tom Van Delm*

- 46. Extending the lifetime of coir substrate in strawberry production through coir reuse and amendment with biochar**

*Lucas Shuttleworth, Xiangming Xu*

## Policy workshop: EU Fertilising Products Regulation – Opportunities and Challenges to place Growing Media and Soil Improvers on the European Market

- 47. EU Fertilising Products Regulation - Requirements for Growing Media and Soil Improvers based on Compost and Digestate**

*EU Commission, DG GROW (tbc)*

- 48. Opportunities and challenges for the manufacturers of growing media**

*Nele Ameloot, Growing Media Europe, Technical expert*

- 49. Opportunities and challenges for the manufacturers of soil improver**

*Irmgard Leifert, European Compost Network and RETERRA Service GmbH, Technical expert*

- 50. Conformity assessment procedures for waste derived organic materials under the new EU Fertilising Products Regulation**

*Wim Vanden Auweele, European Compost Network and Vlaco vzw, Technical expert (tbc)*