To watch the **SusGro 2015 Program,** please use one of the following links:

Overview

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Detail

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o13		Quality Control of Compost in Austria?	Horst Müller (Compost Quality Association Austria, AUSTRIA)
	18.30	Welcome Reception at the Vienna Town Hall	
Tuesday, 8th September			
Chair: Chris Blok			
keynote	**8.30-9.00**	**An Overview of New and Revised Methodologies and Technologies in Substrate Analysis and Characterization**	**Brian Jackson (North Carolina State University, USA)**
o14	9.00-10.15	Informed decision making: A tool to aid the decision making process of sourcing responsible growing media throughout the UK supply chain	Paul Alexander (Royal Horticultural Society, UK)
o15		SELECTING RAW MATERIALS FOR SUSTAINABLE POTTING SOILS: INDICATORS FOR POTENTIAL BIODEGRADATION AND N IMMOBILIZATION	Jane Debode (ILVO, Plant Sciences Unit, BELGIUM)
o16		Rhizometer Root Tracing Techniques and Digital Image Analysis for Assessing and Quantifying Seedling Root Growth in Substrates	Brian Jackson (North Carolina State University, USA)
o17		Effects of Different Fertigation-Growing Medium Systems on Plant Morphometric Response During Soilless Strawberry Growth	Paolo Zucchi (Fondazione Edmund Mach, ITALY)
p12	10.15-10.30	RHP Potting Reference; a basic Tool for application of Growing Media	Hans Verhagen (Stichting RHP, THE NETHERLANDS)
p13		Using PCA and Clustering analysis methods to evaluate different mixes for growing media assessment (A case study for palm date substrates)	Majid Basirat (Soil and Water Research Institute, Karaj, IRAN)
p14		Determination of potassium concentration in hydroponically grown lavender in perlite	Antonios Chrysargyris (Cyprus University of Technology, CYPRUS)
p15		Seed germination and oxygen uptake rate (OUR) tests in coco-peat marketed in Italy	Laura Crippa (University of Milan, ITALY)
p16		Valorization of crushed bricks as a substrate component for the production of potted herbs	Henrique Ribeiro (Technical University of Lisbon, PORTUGAL)
	10.30-11.00	COFFEE BREAK	
Chair: Hans Verhagen			
o18	11.00-12.30	Application of a Simplified Soilless Culture System Using Controlled-release Fertilizer to Tomato Production on Farmlands Damaged by the Great East Japan Earthquake in Northern Japan	Takafumi Kinoshita (National Agriculture and Food Research Organization, JAPAN)
o19		Organic Fertilisers and Nitrogen Availability	Chris Blok (Wageningen University and Research Centre, THE NETHERLANDS)

o20		Solution ammonium:nitrate ratio and cation/anion uptake affect acidity or basicity with floriculture species in hydroponics	Ryan Dickson (University of Florida, USA)
o21		The Response of Pelargonium to Different Growing Media and Liquid Fertilizers - An Experimental Comparison	Gracie Barrett (Royal Horticultural Society, UK)
o21a		A rice-chaff and soil composite helps Komatsuna (Brassica rapa var perviridis) survive in a high-concentrated salt solution	Uzuki Matsushima, Iwate University, Japan
p17	12.30-12.50	Analyzing carbon fraction of growing media by near-infrared spectroscopy	Dieter Lohr (Weihenstephan-Triesdorf University of Applied Sciences, GERMANY)
p18		Possibility of used new eco-materials based on polyphosphate glass in agriculture	Ana M.Vujošević (Institute for technology of nuclear and other mineral raw materials, SERBIA)
p19		A material flow analysis of nutrients to determine the potential of wastes to improve soil fertility in Busia District, Uganda	Jakob Lederer (Vienna University of Technology, AUSTRIA)
p20		Urban Waste as Container Media in a Rooftop Garden Experiment	Baptiste J.-P. Grard (University ParisSud - CNRS, FRANCE)
p21		Production and use of Sphagnum biomass as a plant substrate in greenhouse	Olli Reinikainen (Vapo Ltd., FINLAND)
	12.50-14.00	LUNCH	
Chair: Brian Jackson			
o22	14.00-15.00	A Step Toward Understanding Dynamic Properties of Soilless Substrates	James S. Owen (Virginia Tech, USA)
o23		Growing media constituents used in the EU - an update	Gerald Schmilewski (Klasmann-Deilmann, GERMANY)
o24		Quality Control of Growing Media for the Retail Market	William R. Carlile (Bord na Mona Research Centre, IRELAND)
o25a		Back to the roots - the Art of Composting and the Humus Challenge	Florian Amlinger (Compost - Development and Consultancy, AUSTRIA)
p22	15.00-15.20	Evaluation of almond shells as covering material and minor component in substrates for young plants	Costantino Cattivello (ERSA FVG, Substrates Laboratory, ITALY)
p23		Effect of cocoa pod husk mulch on ornamental quality of bedding plants and soil chemical properties in short growing season	Olesja Korotkova (Estonian University of Life Sciences, ESTONIA)
p24		Substrate depth greatly influences vegetation development on extensive green roofs in a Mediterranean and temperate maritime climate	Oliver Grunert (Peltracom, BELGIUM)

Effects of Different Fertigation-Growing Medium Systems on Plant Morphometric Response During Soilless Strawberry Growth

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The use of organic peat-substitute growing media is arising in the strawberry soilless orchard of Trentino region (Northern Italy). The field performances of these substrates often give contrasting results, probably because of the management standardized on peat. Thus, finding the right fertigation management is essential for the low technological local growing practice in order to determine and compare performance of these substrates. Therefore, the trial tested 3 substrates (85% peat and 15% coir (PC), 50% coir and 50% conifer wood (CW) and 100% coir (CC)); 3 electrical conductivity (EC) levels (0.9; 1.2 and 1.5 dSm^{-1}) and 4 irrigation schedules (1.5 min every 15 min; 3 every 30; 4.5 every 45 and 6 every 60; 2,4 l/h, with a time-window function of the leaching percentage). During the season, chemical traits of the growing media and leachates were monitored. Strawberry (*Fragaria x ananassa* Duch.) plant vigour traits were measured: petiole and rachis length, runner and crown number, leaf chlorophyll content. At the beginning of treatment, CC showed a K and Na content up to 2.5 times higher, and a Ca and Mg content up to 10 times lower than PC, whereas CW had an intermediate content. The growing media had a different pH: PC showed the lowest value and the CW the highest, maintaining this trend during the season, except at the end. There was an inverse ratio between EC treatment levels and pH while the irrigation management did not affect neither the pH nor the EC of both substrates and leachates. Plants grown on PC reached the highest vigour whereas on CW showed the lowest. The lower EC level determined a minor vigour only at the end of growth. Results showed that the effects of the different treatments tested did not overcome the characteristics effects of the different substrates.

Keywords:
Electrical conductivity, irrigation schedules, peat, coir, wood fibre