

Tuesday 13 September			Where?
When?			
13:00-13:30	Registration of participants		Campus P39, Caristasstraat 39, Melle
13:30-13:45	Introductory session Chair: Jana Zinkernagel		Auditorium P39
10 min	Welcome	Bart Vandecasteele	
5 min	Roadmap for the workshop	Jana Zinkernagel – Geisenheim University (DE)	
13:45-15:15	Session 1. Topic “Fertilization management” Chair: Jana Zinkernagel		Auditorium P39
30 min	Keynote lecture	The EU Nitrate Directive and fertilization management in vegetable production - quo vadis? Karin Rather, State Teaching and Research Institute for Horticulture, Heidelberg	
4 x 10 min	Oral presentation	O1 Development of a protocol for the management of nitrogen fertilization in rocket (Daniele Massa, CREA) O2 Use of VegSyst-DSS to calculate macronutrient requirements for fertigated greenhouse vegetable crops (Rodney Thompson, University of Almeria) O3 Fertilisation trials for nitrogen in leek and cauliflower (Lore Lauwers, PCG) O4 Crop reflectance modeling for precise nitrogen management (Vito Cerasola, University of Bologna)	
5 x 5 min	Poster presentation	P1 (online) Effect of soil amendments and green manure on N fertilization demand of onion and spinach (Terhi Suojala-Ahlfors, Natural Resources Institute Finland) P2 P and K management for vegetable crops under cover (Derivry Elodie, APREL) P3 Development of a methodology to characterize the nitrogen nutritional status of open field processing tomato by means of fast indicators (Jose Maria Vadillo, CICYTEX)	



		P4 Management strategies for the reduction of Cd bioavailability (Kristina Ugrinović, Agricultural Institute Slovenia) P5 Project "REVEIL" - Research of low-input P and K cultivars and practices for lettuce and tomato crops (Claire Goillon, APREL)	
5 min	Questions & topics for Session 2	Zinkernagel, J. – Geisenheim University (DE)	
15:15-15:45	<i>coffee break</i>		<i>Foyer</i>
15:45-16:45	Session 2. Topic "Fertilization management" Chair: Daniele Massa		Auditorium P39
5x10 min	Oral presentation	O5 (online) Yield estimation with normalization indices calculated from SPAD data of different pepper varieties (Cihan Karaca, University of Almeria) O6 Effect of cultivar on monitoring N status of vegetable crops (Rodney Thompson, University of Almeria) O7 (online) Fertilizing system of canning tomato in Bulgaria, case study (Nidal Shaban, University of forestry Sofia) O8 Rapid methods to determinate efficient fertilization management in strawberry (LIFE4DOÑANA PROJECT) (Carlos Campillo, CICYTEX) O9 Improving N-fertilization of leeks using a simulation-based DSS (Jérémie Haumont, ILVO)	
10 min	Summary, conclusion and call to act	Daniele Massa	
16:45-18:30	Campus tour		ILVO
20 min	Greenhouse		
20 min	Experimental fields		



20 mins	Compost site		
30 mins	Drones, sensors and robots		

Wednesday 14 September			
8:30-13:00	Technical tour: Agrotopia (Inagro)		
8:30	Leave ILVO by bus		Campus P39, Caristasstraat 39, Melle
13:00-13:30	Lunch		ILVO
13:30-15:00	Session 3. Topic "Irrigation management" Chair: Jana Zinkernagel		Auditorium P39
30 min	Keynote lecture	Crop reflectance monitoring for irrigation management - opportunities and pitfalls (online) Angeliki Elvanidi, University of Thessaly	
3 x 10 min	Oral presentation	O10 (online) Alternative water sources for agriculture - increasing water availability (Dries Mergaert, Inagro vzw) O11 Optimizing drip irrigation strategy in leek (Anne Waverijn, PCG) O12 optimization of irrigation in field vegetables (Noémie Hissette, Proefstation voor de Groenteteelt)	
4 x 5 min	Poster presentation	P6 Optimization of irrigation in field vegetables (Lars Mogren, SLU, Swedish university of agricultural sciences) P7 (online) Research activities in the Pilot Greenhouse park of UTH-Greece (Nikolaos Katsoulas, University of Thessaly) P8 Irrigation of vegetable crops in Estonia (Priit Põldma, Estonian University of Life Sciences)	



		P9 (online) Investigating the impact of EC in irrigation water using waste water from different sectors (Dries Mergaert, Inagro vzw)	
5 min	Questions & topics for Session 4 & 5	Jana Zinkernagel – Geisenheim University (DE)	
15:00-15:30	<i>coffee break</i>		<i>Foyer</i>

15:30-16:30	Session 4. Topic “Irrigation management” Workshop in accordance to Session 3 (division into 3 groups at 3 different places) Chair: Janjo de Haan		Auditorium P39
4 x 10 min	Oral presentation	O13 AI-based irrigation demand model for open field vegetable crops (Jana Zinkernagel, Geisenheim University) O14 Level controlled drainage as subirrigation system: feasibility, obstacles and opportunities (Sander Bombeke, Proefstation voor de groenteteelt) O15 Subsurface drip irrigation in open field grown vegetables in a sandy soil (Pieter Janssens, Soil Service of Belgium) O23 The ‘Virtual Lysimeter’: a decision support tool for irrigation in soil grown greenhouse crops (Wim Voogt, WUR)	
20 min	Summary, conclusion and call to act	Janjo de Haan	
16:30-17:00	<i>break</i>		<i>Foyer</i>
17:00-18:30	Session 5. Workshop in accordance to Session 3 and 4 (division into 3 groups at 3 different places) EU-funding and project ideas		Auditorium P39
45 min	Overview of EU funding opportunities (Horizon Europe)		
45 min	Discussion on future projects/ proposals/topics in respect to this WG		



18:30 – 19:00	General discussion future outlook	
19:00	Social Dinner@Greenhouse	Campus P39, Caristasstraat 39, Melle

Thursday 15 September			
8:30-10:00	Session 6. Topic “Renewable growing media and fertilizers for circular horticulture” Chair: Bart Vandecasteele (ILVO)		Campus P96, Van Gansberghelaan 96, Merelbeke
30 min	Keynote lecture	Use of growing media alternative to peat in press pots for vegetable production - Peat Reduction Strategy of Germany Nazim Gruda, University of Bonn	
3x10 min	Oral presentation	O16 (online) Gaining irrigation insights in high-wire cucumber production on bio-based growing media by use of Growficient sensors (Simon Craeye, Inagro) O17 Bio based fertilisers from vegetable and fruit waste: processes, characterisation and validation (Fien Amery, ILVO) O18 Effects of soil management options in arable farming in the Netherlands on soil functions (Janjo de Haan, Wageningen University & Research)	
10 min	Poster presentation	P10 Digestate derived fertilizers used for fertigation: seed phytotoxicity and plant growth effect (Carmen Biel, IRTA (Agrofood Research Institute)) P11 Combined assessment of stability and N release in growing media based on CO2 flux measurements (Bart Vandecasteele, ILVO)	
5 min	Questions & topics for Session 6	Bart Vandecasteele (ILVO)	
10:00-10:30	coffee break		Campus P96, Van Gansberghelaan 96, Merelbeke



10:30-12:00	Session 7. Topic "Renewable growing media and fertilizers for circular horticulture" Chair: Janjo de Haan (WUR)		Campus P96, Van Gansberghelaan 96, Merelbeke
4x10 min	Oral presentation	<p>O19 Renure fertilizers in horticulture (Jonas Elsen, PSKW)</p> <p>O20 (online) Developing plant bioassays to evaluate the performance of sustainable growing media (Thayna Mendanha, Aarhus University)</p> <p>O21 Don't waste your waste: how used microgreens cultivation substrates become a resource for biochar (Kris Kunnen, Hasselt University)</p> <p>O22 Growing media in cascade for strawberry cultivation: effect of biochar and fertigation (Bart Vandecasteele, ILVO)</p>	
20 mins	Discussion		
30 mins	Summary, conclusion and call to act		
12:00-13:00	Lunch and farewell		Campus P96, Van Gansberghelaan 96, Merelbeke
13:30	<p>Optional: participation in afternoon session: <i>The soil, move up a gear: six challenges for the future (In Dutch)</i></p> <p>More info: https://www.festilvo.be/nl/schema/de-bodem-een-versnelling-hoger-zes-uitdagingen-voor-de-toekomst</p>		

