Platform presentations – 08 April, Afternoon

8 April

Belgium II (60 people)

	Abstract ID	
14:15-15:55		**A1. Harmonization and advances in the detection and characterisation of plastic pollution in the agrifood chain**
		Chairs: Nicolas Beriot (Wageningen University), Bert Van Bavel (NIVA)
14:15		Brief section intro
14:18		**Keynote: Bert Van Bavel (NIVA)**
14:37	77	A multi-technique approach to detect microplastics in soil ***Pierofrancesco Cerruti (Institute of Polymers, Composites and Biomaterials, National Research Council of Italy)***
14:50	50	Microplastics Analysis and the Infrared Spectrum: Is Spectral Range Selection Critical? ***Wesam Alwan (Agilent Technologies, Inc.)***
15:03	74	Fluorescent Labelling of Polystyrene Microplastics for in Situ Detection in Soil ***Shen Sesselle (Ghent University)***
15:16	73	Portable devices for the detection of plastic particles below 15 µm: application of Raman spectroscopy and optical/acoustical tweezers ***Silvie Bernatova (Institute for chemical and physical processes (IPCF), National Research Council of Italy)***
15:29	33	Ensuring representative sample volume predictions in microplastic monitoring ***Richard Cross (UK Centre for Ecology and Hydrology)***
15:42		Minipanel
15:55 - 16:25		Poster time with coffee
16:25-18:20		**B1. Addressing sustainability of plastic in the agrifood sector**
		Chairs: Valentina Tartiu (NIVA) + Ildiko Heim (FiBL) + Giulia Carcasci (FAO)
16:25		Brief section intro
16:28		**Keynote: Giulia Carcasci (FAO)** (15 min + 3 min Q&A)
16:47	94	Holistic and circular approaches for plastic management in agriculture ***Noora Räsänen (MTK-Pohjois-Savo)***
17:00	82	Circular economy pathways to address agriculture plastic waste in 7 countries – A research protocol ***Ravinder Kumar (Natural Resources Institute, University of Greenwich, UK)***
17:13	44	Assessing the ecological and socio-economic impacts of Microplastics at field and farm level: Development of a holistic questionnaire and analysis of survey results in MINAGRIS project ***Ildiko Heim (FiBL Austria)***
17:26	53	Mapping of Agricultural Plastics Pollution in Soil: case study of Italy, France and Norway ***Ali Hachem (University of Bari Aldo Moro)***
17:39	84	Why biodegradable plastic polymers are not a nice to have but a must for certain applications ***Christian Lott (HYDRA Marine Sciences GmbH)***
17:52	18	Safe and sustainable by design polyesters: integrating structural modeling, ecotoxicity and biodegradation studies for fast screening ***Raffaele Bruschi (Università degli Studi di Trieste)***
18:05	95	Circular use of biobased plastics in agri- and horticulture ***Maarten van der Zee*** *(Wageningen Food & Biobased Research)*
18:20		End of day

8 April

Belgium III (120 people)

	Abstract ID	
14:30-15:55		**A2. Plastics and plastic additives in food: a One Health perspectives over plastic pollution**
		Chairs: Lev Neretin (FAO), France Collard (NIVA).
14:15		Brief section intro
14:18	3	**Keynote**: Exposure of U.S. Adults to Microplastics from Commonly-Consumed Proteins **Hannah De Frond (Ocean Conservancy)** (15 min + 3 min Q&A)
14:37	6	Occurrence of microplastics and bisphenols in shellfish on the Croatian Adriatic coast (PLASTICSHELL project) ***Sandra Petričević (Croatian Veterinary Institute)***
14:50	59	Human exposure to microplastic through cod consumption: a focus on Norway ***France Collard (Norwegian institute for Water Research - NIVA)***
15:03	91	Characterizing microplastic contamination in milk and cheese ***Elena Visentin (University of Padova)***
15:16	86	Impact of Microplastics on Honey Bees and Honey Products ***Parisa Gazerani (Oslo Metropolitan University)***
15:29	76	Migration of micro- and nanoparticles from reusable food contact material ***Karla Parga (McGill University)***
15:42		Minipanel
15:55 - 16:25		Poster time with coffee
16:25-18:20		**B2. Understanding the impact of plastics and associated contaminants in soil environments**
		Chairs: Lisa Joos (Ghent University), Melanie Braun (University of Bonn)
16:25		Brief section intro
16:28		**Keynote: Edoardo Puglisi (Università Cattolica)** (15 min + 3 min Q&A)
	4	Conventional and biodegradable microplastics affect soil properties and microbial functions across a European pedoclimatic gradient ***Klara Smidova (RECETOX, Masaryk University)***
16:47	21	Effects of microplastic contamination on soil respiration and carbon sequestration ***Xiaomei Yang (Wageningen Unviersity)***
17:00	14	Effects of Conventional and Biobased Mulch Film Microplastics on Soil Bulk Density, Hydraulic Conductivity, and Water Retention in Two Soil Types Under Wetting-Drying Cycles ***Špela Železnikar (University of Ljubljana)***
17:13	47	Interactions of microplastics with pesticides and veterinary drugs drive effects on ammonia oxidizers and nitrification in agricultural soils ***Eleni Rafaila Lamprou (University of Thesssaly)***
17:26	***70***	Biological Evaluation of Binding of Toxins to Microplastics ***Elien Alderweireldt (Ghent University)***
17:39	57	Plastic legacy of a pandemic: the lingering impacts of personal protective equipment waste on agroecosystems ***Gábor Feigl (Department of Plant Biology, University of Szeged)***
17:52		Minipanel
18:20		End of day

Platform presentations – 09 April, Morning

9 April

Belgium II (60)

	Abstract ID	C1a. Sources, distribution, fate and behaviour of plastics and associated chemical in soils
09:00-10:30		***Chairs: Rachel Hurley (Norwegian Institute for Water Research - NIVA), Christian Laforsch (Bayreuth University)***
09:00		Brief intro
09:03		**Keynote: Christian Laforsch (Bayreuth University)**
09:22	20	The MiCoS project: Monitoring of micro- and macroplastics in 240 arable fields in the Benelux ***Lisa Joos (Ghent University)***
09:35	54	Microplastic contamination in agricultural soils: uFTIR method assessment and European survey of 220 fields ***Nicolas Beriot (Wageningen University)***
09:48	32	Macro- and micro-plastic accumulation in soils under different intensive farming systems: A case study in Quzhou county, the North China Plain ***Hanyue Zhang (Wageningen University)***
10:01	49	Long-term urban compost application leads to coarse microplastics accumulation in agricultural soils ***Gabin Colombini (iEES-Paris, Sorbonne University)***
10:14	68	The Distribution of Pristine and Aged Microplastics in Soil Aggregate Fractions ***Patria Novita Kusumawardani (Ghent University)***
10:30-10:45		Coffee break
10:45-12:35		**C1b. Sources, distribution, fate and behaviour of plastics and associated chemical in soils**
		Chairs: Rachel Hurley (NIVA), Christian Laforsch (Bayreuth University)
10:45		**Keynote: Rachel Hurley (NIVA)**
11:04	69	Mobility and fate of biodegradable microplastics in agricultural soils ***Cynthia Rieckhof Rivas (IMDEA Water Institute)***
11:17	34	Microplastic incorporation into soil aggregates: Insights from two-year field experiments in European agricultural topsoils ***Max Groß (Institute of Crop Science and Resource Conservation - Soil Science, University of Bonn)***
11:30	35	First experimental evidence of fast leaching of small (1.7 µm) microplastics added to soil in field conditions ***Nick Krekelbergh (Ghent University)***
11:43	78	Rainfall-induced transport of microplastics in soils depends on soil pore structure ***Jeongyeon Yun (Swedish University of Agricultural Sciences)***
11:56	56	Plastic additive fate in soil, earthworms and barley: A 2-year field study ***Aristeidis Tsagkaris (University of Chemistry and Technology, Prague)***
12:09	16	Microplastic transport in soil by nematodes ***Yin Liu (Ghent University)***
12:22		Mini panel
12:35-14:15		Lunch break & Poster time

9 April

Belgium III (120)

	Abstract ID	C2a. Effects of plastic residues on plants
09:00-10:30		***Chairs: Luca Nizzetto (Norwegian Institute for Water Research - NIVA), Sannakajsa Velmala (Natural Resources Institute Finland - Luke)***
Chairs		Brief Intro
09:00		**Keynote: Thijs Bosker & Laura Zantis (Leiden University)**
09:03		Biodegradable microplastics induce changes in lettuce defence mechanisms and soil microbial activities ***Sannakajsa Velmala (Natural Resources institute Finland - Luke)***
09:22	22	Short-term impact of plastic and biodegradable mulches on soil health in blueberry plantation in Southern Portugal ***Corina Carranca (INIAV)***
09:35	23	Effects of biodegradable plastics on the uptake of N by plants ***Sara Guerrini (University of Bologna and NOVAMONT)***
09:48	27	Response of maize (Zea mays) growth to soil contaminated with microplastics under field conditions ***Bin Guo (Wageningen University)***
10:01	38	Wood distillate enhances plant defences and yields in bioplastic-contaminated soils, while reducing reliance on chemical solutions ***Silvia Celletti (University of Turin, Department of Agricultural, Forest and Food Sciences - DISAFA)***
10:14	2	
10:30-10:45		Coffee break
10:45-12:35		**C2b. Effects of plastic residues on plants**
		Chairs: Luca Nizzetto (Norwegian Institute for Water Research - NIVA), Sannakajsa Velmala (Natural Resources Institute Finland - Luke)
10:45	26	Comparative Impacts of Leached Chemicals from Conventional and Biodegradable Plastics on Crop Growth and Development ***Laura Zantis (Leiden University)***
10:58	28	Transcriptomic analysis of durum wheat responses to polystyrene nanoplastics ***Giuliana Bruno (University of Tuscia)***
11:11	29	Short-time exposure to microplastics: case study with potted blueberry plants ***Ana Mafalda Tendeiro (ITQB NOVA)***
11:24	42	Polystyrene nanoplastics drive metabolic shifts in pasta wheat towards high sugar accumulation through osmotic stress mechanisms, posing risks to crop yield and food security ***Benedetta Pizziconi (Università Campus Bio-Medico di Roma)***
11:37	63	The defence response of plant cells as an effect of polystyrene nanoparticles in in vitro culture media ***Slawomir Sowa (Plant Breeding and Acclimatization Institute, Poland)***
11:50	88	Impact of Polyethylene Nanoplastics on Plant–Rhizosphere Interactions in Lettuce (cv. Canasta) and tomato (cv. Microtom): A Multi-Omics Approach ***Leilei Zhang (Università Cattolica del Sacro Cuore)***
12:03		Panel discussion
12:16		
12:35-14:15		Lunch break & Poster Time

Platform presentations – 09 April, Afternoon

9 April		Belgium II (60)
14:15-16:00	**Abstract ID**	**D1a. Behaviour and transformations of plastic and associated chemical pollution in soils**
		Chairs: Raffaella Meffe & María de las Virtudes Martínez Hernández (IMDEA Water Institute)
14:15		Brief intro
14:18		**Keynote: Caroline De Tender (Ghent University)**
14:37	40	Co-occurrence of multiple contaminants: unentangling adsorption behaviour in agricultural soils ***Gaowei Tan (Wageningen University)***
14:50	96	Microplastic transport in agricultural soils - from a field to a burrow scale ***Wiebke Mareile Heinze (Swedish University of Agriculture)***
15:03	9	Investigating the Degradation of Biodegradable Mulch Films in Agricultural Soil: A Molecular Approach ***Giuseppe Proietto Salanitri (IPCB-CNR ss Catania & University of Bologna)***
15:16	60	Comparative disintegration/biodegradation of biodegradable in soil mulching films under field conditions in South and North Europe ***Christina Pyromali (Agricultural University of Athens)***
15:29	61	The fate of chemical additives released in agricultural soil from biodegradable mulching films ***Demetres Briassoulis (Agricultural University of Athens)***
15:42	37	The MiCoS project: Determining the biofilm formation over time on macro-plastics in a soil environment ***Jozefien Demeulenaere (Ghent University)***
15:55-16:30		Poster time with coffee
16:30-18:00		**D1b. Integrating data and knowledge from plastic pollution monitoring**
		Chairs: Caroline de Tender (Ghent Univeristy) and Violette Geissen (Wageningen University)
16:30	5	The Global AgriPlastics project: Assessing the societal benefits and risks of plastic film mulch use ***Dave Chadwick (Bangor University)***
16:43	12	Characterizing Microplastics emissions impacts in Life Cycle Assessment of agricultural production ***Anne-Marie Boulay (CIRAIG Polytechnique Montreal)***
16:56	72	Advancing Microplastic Fate Assessment: Incorporating Size Analysis and Abiotic Degradation in Regulatory Testing ***Philipp Dalkmann (Bayer AG - Crop Science Division)***
17:09	90	Agricultural practices as major contributors to microplastic contamination in soil ***Natasa Stojic (University Educons)***
17:22	7	The PLASTIMPACT ENLIGHT thematic network: building a community of scientists and citizens around plastic pollution ***Caroline De Tender (Ghent University)***
17:35-17:45		Break

9 April		Belgium III (120)
14:15-16:00	**Abstract ID**	**D2a. Unravelling plastic impacts in agrifood systems and beyond**
		Chairs: Salla Sellonen (SYKE), Kees Van Gestel (Vrije Universteit Amsterdam)
14:15		*Brief section intro*
14:18		**Keynote: Esperanza Huerta Lwanga (Wageningen University)** (15 min + 3 min Q&A)
14:37	17	The effects of mulching film-derived microplastics on plants, soil organisms and microbial communities in a mesocosm study ***Sam van Loon (Vrije Universiteit Amsterdam)***
14:50	55	A Systematic Approach for a Holistic Ecotoxicological Assessment Strategy of Polymers ***Marie Winter (Fraunhofer Institute for Molecular Biology and Applied Ecology IME)***
15:03	***36***	Human Health effect factor for Micro- and nano-plastic exposure via ingestion in LCA ***Anne-Marie Boulay (CIRAIG Polytechnique Montreal)***
15:16	19	Impact of polyethylene terephthalate microplastics on feed digestive efficiency in ruminants ***Sonia Tassone (Department Agricultural, Forest and Food Sciences, University of Turin)***
15:29	31	Adverse effects of nanoplastics in bovine granulosa cells that accumulate 100 nm and 250 nm polystyrene particles in vitro ***Anja Baufeld (Research Institute for Farm Animal Biology - FBN)***
15:42		Minipanel
15:55-16:30		Poster time with coffee
16:30-18:00		**D2b. Unravelling plastic impacts in agrifood systems and beyond**
		Chairs: Sam Van Loon (Vrije University Amsterdam), Esperanza Huerta Lwanga (Wageningen University)
16:30	46	Effects of conventional and biodegradable microplastics on earthworm Eisenia andrei in two generations ***Vili Saartama (Finnish environment institute - SYKE)***
16:43	11	Effects of microplastics from mulching films on soil invertebrate communities in agricultural field plots from three different geographical regions ***Kees van Gestel (Vrije Universiteit Amsterdam)***
16:56	62	Role of biodegradable and non-biodegradable microplastic in modulating the toxicological effects of organic pollutants in the soil organism Folsomia candida ***Ilaria Negri (Università Cattolica del Sacro Cuore)***
17:09	66	Reproductive and behavioural responses of four soil invertebrate species to two types of polypropylene microplastics originating from agricultural plastics ***Salla Selonen (Finnish Environment Institute - SYKE)***
17:22		Minipanel
17:35-17:45		Break
17:45	Plenary	Closing remarks (Luc Vernet, Edoardo Puglisi, Luca Nizzetto, Violette Geissen)

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Posters

8 April

Poster slot num.	Abstract ID	Session	Title
P1	41	A1	Optimizing methods for quantification of microplastics in agricultural soils ***Joana Antunes (INIAV)***
P2	43	A1	Application of Raman microspectroscopy for the characterization of microplastics in clam Chamelea gallina ***Rosaria Aloia (Istituto Zooprofilattico Sperimentale dell'Abruzzo e del Molise, Via Campo Boario, Italy)***
P3	71	A1	The InPlasTwin project: Increasing expertise in micro- and nanoplastics analysis through twinning action ***Milica Velimirovic (Flemish Institute for Technological Research)***
P4	51	A1	Method development for analysis of nanoplastics in drinking water and milk using transmission electron microscopy (TEM) ***Charlotte Wouters (Trace Elements and Nanomaterials, Sciensano)***
P5	81	B1	Microplastic persistence & environmental impact of non- vs. biodegradable polymers in a conceptual model as a tool combining desired material properties & reduction of accumulation in the environment ***Miriam Weber (HYDRA Marine Sciences GmbH)***
P6	93	B1	Microplastics in agricultural soils – awareness, knowledge and biodegradable product alternatives ***Claudia Preininger (AIT Austrian Institute of Technology)***
P7	103	B1	Hydrophobization of Cellulose Nanocrystals and Rice Husk Surface by Infrared Thermal Activation ***Lucia Gardossi (University of Trieste)***
P8	48	B2	Exploring the role of Plastisphere as a hotspot of Microbial Evolution for New Catabolic and Antibiotic Resistance Traits ***Eustathios (Stathis) Lagos (Department of Biochemistry and Biotechnology, University of Thessaly, Larissa, Greece)***
P9	101	B2	Microplastics in soil: Long-term persistence, Transfer Risks, and Implications for Agroecosystems and Food Safety ***Parisa Gazerani (Oslo Metropolitan University)***

9 April

Poster Slot num.	Abstract ID	Session	Title
P1	39	C1	Microplastic vertical migration in Antarctic soils under successive freezing-thawing cycles ***Esperanza Huerta Lwanga (Wageningen University)***
P2	67	C1	Trophic transfer of microplastics from soil via earthworms (Eisenia fetida) to ground beetles (Poecilus cupreus) ***Sarmite Kernchen (University of Bayreuth)***
P3	102	C1	Response of the ant species Lasius niger to soil contamination with mulch film fragments at the micro- and nanoscale ***Sarmite Kernchen (University of Bayreuth)***
P4	92	C1	Microplastic background levels in German soils ***Zacharias Steinmetz (RPTU Kaiserslautern-Landau, iES Landau)***
P5	1	C2	Effects of microplastics on wheat performance in sewage sludge-amended soils ***Anna Charatzidou (University of Sheffield)***
P6	10	C2	Microplastics from disposable plastic bags induce changes in soil properties and drought-like stress in sunflower ***Anita Jemec Kokalj (University of Ljubljana, Biotechnical faculty)***
P7	15	D1	Biodegradability of microplastics from mulching films: Conventional vs. biodegradable materials in the open environment ***Gabriela Kalčikova (University of Ljubljana, Faculty of Chemistry and Chemical Technology)***
P8	87	D1	Fragmentation of soil-biodegradable mulch film: The difference between fragments released from certified soil-biodegradable products and persistent microplastics ***Patrizia Pfohl (BASF SE)***
P9	65	D2	Harnessing multi-omics insights to investigate environmental microplastic effects in marine polychaetes ***Filippo Vaccari (Università Cattolica del Sacro Cuore)***
P10	79	D2	The effect of pollution on the electrophysiology of epithelium – insights from Caco-2 cell model ***Gabriela Węglińska (Department of Physics and Biophysics, Institute of Biology, Warsaw University of Life Sciences)***
P11	89	D2	Differential toxicological and microbial interactions of compostable and conventional microplastics in zebrafish ***Omayma Missawi (University of Namur, Belgium)***