

## ELLS Scientific Student Conference 2024

*'The puzzle of Life Sciences – Add your piece'*

22 – 23 November 2024, Wageningen University & Research

Location: Orion building

Friday 22 November 2024				
08:30 - 09:00	Registration and coffee			Ground floor
09:00 - 09:15	Official opening ELLS SSC 2024			C1040
09:15 - 10:00	1 <sup>st</sup> Keynote speaker - Prof. Dr. Gregor Halff			C1040
10:10 - 11:10	Campus tour	Meet at reception Orion	Oral session 1.1	B3020
			Oral session 1.2	B3030
			Oral session 1.3	B3034
11:20 - 12:20	Campus tour	Meet at reception Orion	Oral session 2.1	B3020
			Oral session 2.2	B3030
			Oral session 2.3	B3034
12:20 - 13:30	Lunch & SA/ST market			The Spot (Orion) / Ground floor
13:30 - 14:30	2 <sup>nd</sup> Keynote speaker – Dr. Ir. Birgit Boogaard			C1005
14:40 - 15:40	Poster session 1	Ground floor	Oral session 3.1	B3020
			Oral session 3.2	B3030
			Oral session 3.3	B3034
15:40 - 16:05	Refreshment break			The Spot (Orion)
16:05 - 17:05	Poster session 2	Ground floor	Oral session 4.1	B3020
			Oral session 4.2	B3030
			Oral session 4.3	B3034
17:15 - 18:15	Poster session 3	Ground floor	Let's Discuss 1	B3030, B3034
18:30 - 20:00	Dinner			The Spot (Orion)
21:30 - 01:00	Student Party			KSV, Stadsbrink 373, 6707 AA Wageningen

Saturday 23 November 2024				
08:30 - 09:00	Registration and coffee			Ground floor
09:00 - 10:00	Poster session 4	Ground floor	Oral session 5.1	B3020
			Oral session 5.2	B3030
			Oral session 5.3	B3034
10:10 - 11:10	Poster session 5			Ground floor
11:20 - 12:20	Poster session 6	Ground floor	Oral session 6.1	B3030
			Oral session 6.2	B3034
12:20 - 13:15	Lunch			The Spot (Orion)
13:15 - 14:15	Case Study Competition	C1005	Let's Discuss 2	B3030, B3034
14:15 - 14:45	Refreshment break			The Spot (Orion)
14:45 - 16:00	Award ceremony & Closing of the conference			C1005

### Venue of Conference

Orion, building number 103  
 Bronland 1  
 6708 WH Wageningen

### Venue of Student Party

KSV  
 Stadsbrink 373  
 6707 AA Wageningen

Contact: [ells24@wur.nl](mailto:ells24@wur.nl) Website: [www.wur.eu/ells2024](http://www.wur.eu/ells2024)

Friday 22 November 2024

Oral session 1 at 10:10 - 11:10

Session 1.1: Creating food in a changing world (B3020 Orion)			Session 1.2: Resilient use of natural resources (B3030 Orion)			Session 1.3: Designing sustainable transitions (B3034 Orion)		
ELSA chairs: Benjamin Petržela, Tereza Otcová SPPC: Geir Løe, Yael Helman			ELSA chairs: Tibo Roelants, Annemarie Jung, Jeanne Richard SPPC: Franz Grossauer, Adriaan Westgeest			ELSA chairs: Noor Holleman, Barnaba Sibilski SPPC: Elise Norberg, Mati Koppel		
Name	University	Title	Name	University	Title	Name	University	Title
1 Samy De Oliveira	AGRO	Rapid viral detection in milk using near infrared spectroscopy combined with chemometrics and neural networks	1 Yoost Raevel	WUR	Future-proofing the Randstad's drinking water supply: Utility of the DAPP approach (Dynamic Adaptive Policy Pathways)	1 Katharina Angerer	NMBU	The influence of Farm Advisory Services on the use of Agroecological Practices among Farmers in Germany, with emphasis on Bavaria
2 Anna Tsibidis	CZU	Early growth agronomic research on Kernza Intermediate Wheatgrass: effect of soil type and fertiliser amendments	2 Tomasz Bartoszek	SGGW	Impact of polystyrene nanoparticles on development and mortality of zebrafish (Danio rerio) embryos – preliminary study	2 Hannah Gläser	BOKU	Impact of Participation in an Alternative Food Network on Consumer Perception of Agriculture – A case study in the Netherlands
3 Pauline Seeburger	SLU	Growing the Future: Exploring Vertical Farming from a Plant Science Perspective	3 Isabell Kuhn	UHOH	Effects of forest management on haemosporidian vectors infecting Parus major in the Wienerwald Biosphere Reserve	3 Florian Kaltenecker	UHOH	Sensor Based Machine Learning Approach for Non-Destructive Quality Evaluation and Shelf-Life Prediction of Agri-Food Products

Oral session 2 at 11:20 - 12:20

Session 2.1: Creating food in a changing world (B3020 Orion)			Session 2.2: Discovering lifes code (B3030 Orion)			Session 2.3: Following the steps of the farmer (B3034 Orion)		
ELSA chairs: Benjamin Petržela, Tereza Otcová SPPC: Geir Løe, Yael Helman			ELSA chairs: Michael Stummer, Alicja Gniadzik SPPC: Hilde Willekens, Julia Senge			ELSA chairs: Barnaba Sibilski, Annemarie Jung SPPC: Tiny van Boekel, Maria Rembialkowska		
Name	University	Title	Name	University	Title	Name	University	Title
1 Mathilde CHASSERAY-- DESCHAMPS	AGRO	Stimulating plant immunity: an alternative in the fight against bacteria?	1 Dennis Vlegels	WUR	Resolving the Neoavian radiation using synteny-based phylogenomic methods: insights into genome evolution of modern birds around the Cretaceous-Paleogene extinction event	1 Venkata Avinash Addanki	SGGW	Exploring the impact of insecticides on Amblyseius andersoni (Chant): Understanding resistance and compatibility
2 Marie Veselá	CZU	Changes of tocots in the frying medium during the preparation of French potatoes	2 Yanisse Basauri Torres	BOKU	The Role of LEADER as Support for Social Innovation in Forest-Related Case Studies in rural areas from Austria, Germany, Finland, and Spain	2 Martina Čapková	CZU	Caring for fields: Evaluating fungicide resistance of cereal pathogens to enhance sustainable farming practices
3 Shraddha Dhamore	CZU	Genetic evaluation of M4 population of Pigeon pea (Cajanus cajan(L.) Millsp.) through molecular markers	3 Pavel Kouřimský	CZU	The effect of vitamin D supplementation on enhanced efficiency of plant alkaloids in a 3D model	3 Daniela Wöber	BOKU	Microbial factors underlying genotype-specific storability of sugar beet

**Oral session 3 at 14:40 -15:40**

<b>Session 3.1: Discovering lifes code (B3020 Orion)</b>			<b>Session 3.2: Resilient use of natural resources (B3030 Orion)</b>			<b>Session 3.3: Designing sustainable transitions (B3034 Orion)</b>		
ELSA chairs: Tibo Roelants, Alicja Gniadzik SPPC: Hilde Willekens, Julia Senge			ELSA chairs: Barnaba Sibilski, Michael Stummer SPPC: Franz Grossauer, Adriaan Westgeest			ELSA chairs: Noor Holleman, Johanne Sofie Iversen SPPC: Elise Norberg, Mati Koppel		
<i>Name</i>	<i>University</i>	<i>Title</i>	<i>Name</i>	<i>University</i>	<i>Title</i>	<i>Name</i>	<i>University</i>	<i>Title</i>
1 Muhammad Arslan Ibrahim	SGGW	A preliminary investigation on dispersal of mites by fruit flies in composting environments	1 Anna Fontova-Musté	UdL	Determination of functional patterns in Pinus pinea from the Spanish Northern Plateau: Relationships between secondary growth, defences and reproduction	1 Ilaria Serafini	Unitus	Market acceptance and trade channels of sub-optimal fruits and vegetables: a case study on carrots
2 Katharina Pütz	BOKU	Antimicrobial peptide based multifunctional coatings for orthopedic implants reduce staphylococcus aureus adhesion and survival	2 Annemarie Josková	CZU	Impact of human activities on dragonfly larval performance: A comparison of natural and man-made habitats	2 Qhadira KISSANGOU CHUMO	AGRO	Parents facing financial hardship's perception of the cost of a transition towards a more plant-based diet
3 Theresa Kaufmann	UHOH	Differentiation of the syndrome basses richness agents in sugar beet	3 Weronika Juszczuk	SGGW	A new era for forestry or a risk for the economy? – European Green Deal through the eyes of young foresters	3 Gizem Serin	BOKU	Battling Bunt: Unravelling Wheat's Defense Against the Dark Spore Menace

**Oral session 4 at 16:05 - 17:05**

<b>Session 4.1: Creating food in a changing world (B3020 Orion)</b>			<b>Session 4.2: : Resilient use of natural resources (B3030 Orion)</b>			<b>Session 4.3: Designing sustainable transitions (B3034 Orion)</b>		
ELSA chairs: Theresa Kaufmann, Maëlys Chicois SPPC: Geir Løe, Yael Helman			ELSA chairs: Johanne Sofie Iversen, Julia Eriksson SPPC: Franz Grossauer, Adriaan Westgeest			ELSA chairs: Krijn Stufkens, Alicja Gniadzik SPPC: Elise Norberg, Mati Koppel		
<i>Name</i>	<i>University</i>	<i>Title</i>	<i>Name</i>	<i>University</i>	<i>Title</i>	<i>Name</i>	<i>University</i>	<i>Title</i>
1 Tibo Roelants	UGent	Cell-based agriculture as solution to resource crisis in the agro-food chain	1 Bruna Jesus dos Santos	SLU	African Women Abuse Their Freedom: Gender Dynamics and Sustainable Business in Southern Kenya's Non-Timber Forest Products Sector	1 Zuzanna Kulis	SGGW	Characteristics of water bodies as habitats for amphibians on the example of Babia Góra National Park
2 Jakub Folke	CZU	Rearing house crickets using feed enriched by rapeseed and flaxseed oils	2 Alessandra Filieri	Unitus	Natural based solutions for in situ bioremediation of Hydrocarbon polluted urban area	2 Mathilde Maeght	AGRO	Will there be distortions of competition between EU Member States resulting from the National Strategic Plans for the Common Agricultural Policy 2023-2027? Focus on France, Germany, Spain, Romania and Poland
3 Mehdi Hassan	BOKU	Implementation of Sorghum in Bakery Products	3 Philipp Keutner	BOKU	Influence of climate on the drought resistance of Central European tree species using tree ring and carbon isotope analyses	3 Kushal Poudel	NMBU	Empowering Change: Agroecological Approach to Coffee Pulp Composting, A case study of Rusizi District Rwanda

Saturday 23 November 2024

Oral session 5 at 09:00 - 10:00

Session 5.1: Creating food in a changing world (B3020 Orion)			Session 5.2: Resilient use of natural resources (B3030 Orion)			Session 5.3: Following the steps of the farmer (B3034 Orion)		
ELSA chairs: Tibo Roelants, Ingeli Mortensen SPPC: Geir Løe, Yael Helman			ELSA chairs: Maëlys Chicois, Sirli Ilves SPPC: Franz Grossauer, Adriaan Westgeest			ELSA chairs: Theresa Kaufmann, Julia Eriksson SPPC: Tiny van Boekel, Maria Rembalkowska		
Name	University	Title	Name	University	Title	Name	University	Title
1 Bianca Smuts	SLU	Evaluation of the growth development of 10 field-grown potato cultivars under drought stress in South Africa	1 Bogumit Łosiewicz	SGGW	Impact of silver nanoparticles and ions on development and maturation of guppy ( <i>Poecilia reticulata</i> )	1 Clara Königsmair	BOKU	Intraguild predation between predatory mites: Which species native to Austria profits from climate change induced higher temperatures?
2 Kilian Kaspar Wallner	BOKU	Extreme weather threatens Brazil's soybean systems	2 Gatien Debailleul	AGRO	Carbon and nitrogen stable isotopes: A new way to predict the individual feed efficiency of European seabass ( <i>Dicentrarchus Labrax</i> )?	2 Gregor Nowotny	BOKU	Characterization of granadaene-producing <i>A. thoenii</i> and <i>A. jensenii</i> strains from the dairy environment
3 Elena Marek	BOKU	Properties of ohmic baked goods relevant for industrial application	3 Alina Noor	NMBU	Short-term nutritional impact of ethyl ester oil supplementation in Atlantic salmon	3 David Velaz Bravo	UdL	Legal analysis of the new Spanish figure of the farm veterinarian and its involvement in the fight against antimicrobial resistance

Oral session 6 at 11:20 - 12:20

Session 6.1: Discovering lifes code (B3030 Orion)			Session 6.2: Shaping the new economy / Designing sustainable transitions (B3034 Orion)		
ELSA chairs: Krijn Stufkens, Noor Holleman SPPC: Hilde Willekens, Julia Senge			ELSA chairs: Johanne Sofie Iversen, Michael Stummer, Jeanne Richard SPPC: Elise Norberg, Mati Koppel, Tiny van Boekel, Maria Rembalkowska		
Name	University	Title	Name	University	Title
1 Katarzyna Sęk	SGGW	Nature-Inspired Innovation: Applying Biomimicry to the Design of 15-Minute Cities	1 Abiola Bridget Adewuyi	Unitus	Post-fire regeneration recovery in Vesuvio using Sentinel 2 and Planet data
2 Chrisja van de Kieft	WUR	Exploring variables responsible for the inter-personal variability in postprandial glucose response: a machine learning approach	2 Alina Kuehn	SLU	Modelling water storage capacity in small constructed wetlands – today and in the future
3 Hildegunn Haugan	NMBU	Microglia's role in the pathogenesis of Parkinson's Disease			

Friday 22 November 2024

Poster session 1 at 14:40 - 15:40

Creating food in a changing world (Ground floor Orion)

ELSA moderators: Krijn Stufkens, Einar Nordgren, Jeanne Richard

SPPC: Peter Kumble, Anna Bzducha Wróbel

Name	University	Title	Name	University	Title	Name	University	Title
1 Enemona Ademu	CZU	Implementation of Sorghum in Pasta Products	5 Annalena Janentzky	UHOH	Potential of the microalgae Phaeodactylum Tricornutum as an alternative source of eicosapentaenoic-acid in the context of the DGE recommendations and the "planetary health diet" with a focus on consumer acceptance	9 Kari Løe	SLU	Nitrous oxide emissions after ploughing from a long-term organic grass-clover ley system - Implications of anaerobic digestion of cattle slurry on climate change and plant production
2 Caroline Blecker	UHOH	Differences in salinity tolerance among Chenopodium quinoa Willd. (quinoa) accessions	6 Petr Kopecký	CZU	Lysozyme as a key selection factor of breast milk for infant gut microbiota	10 Freyja Röntgen	UHOH	Investigating the mechanism of adaption to water deficit tolerance in different Chenopodium quinoa accessions
3 Hester Boekhoud	WUR	Drinks with low- and non-nutritive sweeteners do not elicit a glycemic response while they vary in gastric emptying	7 Zuzanna Korzeniowska	SGGW	The usage of innovative methods for yeast cell wall disintegration	11 Queenchilu Tayang	BOKU	A Comparative Study on Advancements in Tofu Production Methods: Chemical, Microbial, and Enzymatic Approaches
4 Wanda Haller	UHOH	Need for Speed – Can speed breeding revive safflower's popularity as an oilseed crop?	8 Martin Ladurner	BOKU	Gastrointestinal stress survival of Cronobacter sakazakii food and clinical isolates under simulated adult and infant digestion conditions	12 Yllka Visoka	BOKU	Development of a mid-infrared spectroscopic method for mycotoxin screening in maize

Poster session 2 at 16:05 - 17:05

Discovering lifes code (Ground floor Orion)

ELSA moderators: Einar Nordgren, Sirlil Ilves

SPPC: Ellen Stegers, Eric Dubreucq

Name	University	Title	Name	University	Title	Name	University	Title
1 Sylwia Jankowska	SGGW	Investigating the Neuroprotective Effects of Graphene Oxide and Nanodiamonds on C6 Glioma Cells: Contributions of Ascorbic Acid Composites	5 Madli Saat	EMU	Toxic cyanobacteria in aquatic food webs	9 Mads Voldengen	NMBU	Drops of Diversity: eDNA metabarcoding potential for tree canopy biodiversity assessment
2 Jagoda Zagrodzka	SGGW	Comparative analysis of apolipoprotein APOA1 in the domestic dog (Canis lupus familiaris) and humans: Are domestic dogs a good animal model for research on human amyloidosis?	6 Grzegorz Hycnar	SGGW	Application of CRISPR/Cas9 system for direct mutagenesis in Arabidopsis thaliana MnmG gene- genotyping and phenotype characterization of acquired mutants	10 Adela Gaja Jezierska - Suwińska	SGGW	Data-Driven Pest Defense: Using Transcriptomic Data to Identify Plant Genes Conferring Resistance to Two-Spotted Spider Mite
3 Weronika Jabłońska	SGGW	Meta-analysis of APOA1 and APOA2 linkage in laboratory models - implications for amyloidosis research	7 Chelsea Rosemary Thiery Tjong	WUR	Physical stability of Pickering emulsions stabilized by fumed silica particles: a microfluidic study	11 Karlygash Zhussupova	CZU	Phytomycoremediation of Soil Polluted with Radionuclides
4 Hannah Gartner	BOKU	Looking for the needle in the haystack – genotypic and phenotypic testing of CRISPR/Cas wheat mutant lines for gene identification	8 Jaroslav Strádal	CZU	Uncovering Genes in Novel Biosynthetic Pathway of cis-Verbenol in the Aggressive Forest Pest Ips typographus			

Poster session 3 at 17:15 - 18:15

Mix of different themes (Ground floor Orion)

ELSA moderators: Annemarie Jung, Ingeli Mortensen

SPPC: Peter Kumble, Anna Bzducha Wróbel, Chrystal Turnbull, Siim Teder, Sebastian Bopper, Romi Pena, Ellen Slegers, Eric Dubreucq

Name	University	Title	Name	University	Title	Name	University	Title
1 Nour Zaher	Unitus	Biodiversity and Ecological Resilience of Quercus robur (L.) in the Castelporziano Presidential Estate (Roma, Italy): Past, Present and Future	5 Sarah Prenner	BOKU	Pulsed electric fields as a pre-treatment for ohmic cooking of beetroot to improve heating uniformity and product quality	9 Ivan Šebesta	CZU	The effect of biochar on the quality of soil organic matter in the forest ecosystem
2 Katarzyna Wojtak	SGGW	Exploring the Neuroprotective Potential of Graphene Derivatives and Nanodiamonds in Primary Neural Cell Cultures: Insights from Ascorbic Acid Composites	6 Yaliwe Nkhoma	CZU	Sustainable Feedstock Management and Gender-Inclusive Biogas Adoption in Sub-Saharan Africa: A Zambian Case Study	10 Junita Solin	WUR	Leveraging environmental data to predict crop performance in untested environments
3 Martyna Gryglas	SGGW	How does bioinformatics prevent suffer of cystinuria in domestic dog (Canis lupus familiaris) with genes meta-analysis?	7 Monika Pilátová	CZU	Monitoring the intra-population variability of Norway spruce based on physiological, optical and phenological traits	11 Václav Trojan	CZU	Effect of the Artificial Mycorrhizal Inoculation on the Prosperity of Selected Tree Species on Afforested Former Agricultural Land
4 Karolina Węglińska	SGGW	Comparative analysis of amyloidosis in the domestic horse (Equus caballus) and the domestic dog (Canis familiaris)	8 Amandine Ouédraogo	AGRO	Modelling potato growth and yield in Response to climate change in Morocco: Adaptation and Evaluation of the Agricultural Production Systems simulator Model (APSIM)			

Saturday 23 November 2024

Poster session 4 at 09:00 - 10:00

Designing sustainable transitions (Ground floor Orion)

ELSA moderators: Einar Nordgren, Lisanna Karja

SPPC: Sebastian Bopper, Romi Pena

Name	University	Title	Name	University	Title	Name	University	Title
1 Angelica Ramirez Moguel	UGent	Long-term soil phosphorus (P) mining in agriculture – Impacts on P fractions, P leaching risk, and soil organic carbon stocks	5 Magdalena Michalska	SGGW	Impact of Culturing Conditions on Lipid Synthesis by Yeast in Lactose-Based Medium	9 Linsha Retnaraj Lailambika	BOKU	Implementation of Sorghum in bakery products: Chemical Analysis and Baking Trials
2 Julia Eberharter	BOKU	Gender equality and Gender Mainstreaming in agriculture and rural areas in Austria: perceptions of Rural Youth Austria	6 Rosina Neubauer	BOKU	Application of irreversible, thermochromatic ink, for process optimization of microwave assisted freeze drying	10 Sarah-Maria Scheid	WUR	Assessing the agronomic potential for soil carbon sequestration through management practices in German arable farming - a farmer's perspective
3 Adèle Galiègue	WUR	Welcome in our Backyard: Influence of pro-environmental attitude and community identity on individual willingness to participate in Renewable Energy Communities	7 Lucie Raymond	AGRO	Assessing the effect of functional floral diversity of weeds on pollinator communities across a gradient of farming practices in vineyards in southern France	11 Anna Smertina	BOKU	Digitalization of innovative continuous thermal sterilization: assessing ohmic heating assisted sterilization
4 Edonisë Krasniqi	BOKU	Nutritional enhancement of Sorghum through germination as a sustainable solution for bakery products in Europe	8 Neda Rafizadeh	UHOH	Investigating the internal and external influencing factors on organic farming development in Iran in the last ten years	12 Jakub Wolski	SGGW	Immerse in nature - VR goggles and 3D models in nature and forestry education

Poster session 5 at 10:10 - 11:10

Shaping the new economy / Following the steps of the farmer (Ground floor Orion)

ELSA moderators: Theresa Kaufmann, Julia Eriksson

SPPC: Sigrid Netherer, Saul Burdman

Name	University	Title	Name	University	Title	Name	University	Title
1 Ashmita Acharya	UHOH	Adaptation of the circular terrabioponic cultivation system with 3D textiles	5 Afseena Viripakkal	AGRO	A comparative study of gender dynamics between multi-generation family farms and first-generation farms in Brittany	9 Esther Moinat	WUR	Living on the edge: exploring weed trait selection in strip cropping
2 Maximilian Häring	UHOH	Impact of agrivoltaics altered microclimate – studying growth and development adaptations of winter wheat	6 Sutrisno	SGGW	Unveiling Senescence Dynamics in Cut Inflorescences of Bigleaf Hydrangea 'Royal Surprise' (Hydrangea macrophylla)	10 Nabilah Amany Samsurizal	SGGW	Optimizing micropropagation of Indian Snakeroot (Rauvolfia Serpentina (L.) Benth. Ex Kurz) using gamma ray irradiation
3 Barnaba Sibitski	SGGW	This-ability: to overcome underdeveloped factors of labour market for people with disabilities	7 Nina Cieplak	SGGW	How to correctly support feeding behavior in dogs?	11 Theresa Strobl	BOKU	Estimating soil properties under different moisture conditions using Vis-NIR-SWIR reflectance spectroscopy
4 Esmee Venema	WUR	How omnivores shape the interaction between plants, herbivores and their natural enemies	8 Kateřina Matoušová	CZU	Behavioural context of tail postures and movements in wild boar (Sus scrofa)	12 Aleš Tichý	CZU	Is scratching against substrate contagious behaviour in wild boar (Sus scrofa)?

Poster session 6 at 11:20 - 12:20

Resilient use of natural resources (Ground floor Orion)

ELSA moderators: Krijn Stufkens, Ingeli Mortensen

SPPC: Chrystal Turnbull, Siim Teder

Name	University	Title	Name	University	Title	Name	University	Title
1 Eirik-Mathias Bjørnø Rummelhoff	NMBU	Exploring Substrate Specificity in Lytic Polysaccharide Monooxygenases	5 Jessica Lizbeth Canchig Pilicita	SGGW	Quantification of Greenhouse Gas Emissions from the Biebrza River channel and floodplain and its changes over historical times and future forecasts	9 Liese van Dongen	WUR	Convivial Conservation; a new journey beyond Rewilding? - A critical analysis of a Rewilding Europe project in the Romanian Danube Delta and its alignment with the convivial conservation proposal
2 Konstantinia Andreadou	UHOH	Climate Growth Behavior of Douglas Fir (Pseudotsuga menziesii) - A Tree-Ring Analytical Study	6 Silvia Faravelli	SLU	The project investigates local knowledge of Moringa leaf extracts, analyzing their chemical composition and effectiveness on tomatoes under drought stress	10 Chiara Vezzaro	WUR	Controlling eutrophication: the combined action of algaecides and a P-binder for suppressing cyanobacteria and removing phosphate from lake water and sediment
3 Candie Arribert	AGRO	Key variables influencing strawberry recovery from heat stress: soil types and their potential microbial community impact supporting plant, monitoring by electrophysiology signal sensors	7 Danica Juhazyova	CZU	Overview of solar and wind-driven water pump designs applicable for the arid and semi-arid areas of Africa, Asia, and Latin America	11 Sunah Yoon	UHOH	Pathogen Suppressiveness and Rhizobiome Dynamics in Young Vegetable Plants Grown in Biochar x EM-Amended Peat-free Substrates
4 Marek Bartůněk	CZU	Potential of Damages on Stands of Scots Pine – Locality Pilsen	8 Rinda Kustina	SGGW	Issues of Peatland Restoration Across Scales: Hydrological Consequences and Knowledge Gaps – a Review			