



INNO-SAFE-LIFE REPORT

STAFF TRAINING

Organized by Sveuciliste Josipa Jurja Strossmayera u Osijeku, Faculty of Agrobiotechnical Sciences Osijek, Croatia

P2 of the ERASMUS KA220-HED - Cooperation partnerships in higher education, project no. 2023-1-RO01-KA220-HED-000164767, Partnership for innovation on the exchange of best practices and the design of joint collaborative initiatives at European level related to the awareness of the effects contamination on human health

The specific objectives of Work Package n°2 – Teaching, Training and Learning are to provide continuous training for specialists by addressing international and interdisciplinary topics relevant to soil, food, and health contamination; to educate and support students in developing and implementing innovative techniques and protocols at institutional, national, and international levels; to integrate expertise from agriculture, horticulture, health, and industry in order to ensure knowledge transfer, promote sustainable practices, and respond to global challenges such as climate change and antimicrobial resistance; and to foster professional development, civic engagement, and entrepreneurial skills through theoretical and practical activities designed to stimulate active participation and innovation.

The main results of Work Package n°2 – Teaching, Training and Learning will consist of the formation of a well-prepared group of experts with advanced interdisciplinary and complementary qualifications, alongside a significant number of students equipped with the skills to develop innovative solutions in the fields of agriculture, horticulture, health, and industry. The activities will generate progress and training reports as well as digital support materials to ensure the transfer of knowledge and best practices. Direct beneficiaries, including academic staff, researchers, industry specialists, and students, will gain both theoretical and practical competencies, while indirect beneficiaries, such as the wider population, will benefit from improved access to qualified professionals and comprehensive educational resources. These results will contribute to strengthening international cooperation, enhancing professional development, and reinforcing the link between higher education, research, industry, and society.

Staff training period: 13-17 May 2024

Between 13–17 May 2024, a comprehensive training program was organized at Sveuciliste Josipa Jurja Strossmayera u Osijeku (UNIOS) within the framework of the INNO-SAFE-LIFE project. The training brought together academic staff, researchers, students, and industry representatives to strengthen interdisciplinary knowledge and practical skills related to soil-to-food-to-health contamination, pesticide residues, pharmaceutical and chemical risks, phytoremediation, food safety, and sustainable practices.





The training was divided into two parts:

Theoretical sessions (Days 1–3) – focusing on scientific knowledge transfer and interdisciplinary dialogue.

Practical sessions (Days 4–5) – focusing on laboratory training, applied techniques, and evaluation.

1. Theoretical Part (Days 1-3)

Objectives

To provide an overview of the host institution and the project's goals.

To deliver interdisciplinary lectures addressing key issues in agriculture, food safety, health, and environmental sustainability.

To encourage collaborative discussions and working groups.

Main Topics

Day 1 (13.05.2024):

Project introduction and institutional presentation.

Lecture on Determination of pesticide residues using the QuEChERS method.

Day 2 (14.05.2024):

Presentations on pharmaceutical waste, soil mycobiota, PCR identification in food, and climate change effects on human metabolism.

Working group activities and interdisciplinary discussions.

Day 3 (15.05.2024):

Sessions on phytochemicals for human health, oxidative stress protection, phytoremediation of heavy metals, microplastics and inflammation, and safe raw materials in supplements.

Collaborative discussions and working group outputs.

Outcomes

The theoretical sessions successfully provided participants with a solid interdisciplinary foundation, fostered exchange of expertise across sectors, and encouraged dialogue on practical applications of research in real-world contexts.





2. Practical Part (Days 4-5)

Objectives

To reinforce theoretical knowledge through hands-on laboratory training.

To equip participants with practical methodologies relevant to pesticide residue analysis, phytoremediation, and pathogen detection.

To evaluate the acquisition of technical and interdisciplinary competencies.

Main Activities

Day 4 (16.05.2024):

Laboratory workshop on Determination of pesticide residues using the QuEChERS method.

Applied training on Phytoremediation techniques for heavy metals in soils.

Day 5 (17.05.2024):

Laboratory work on Determination of soilborne pathogens.

Final evaluation of acquired knowledge and group conclusions.

Outcomes

The practical sessions allowed participants to apply advanced laboratory methods, integrate interdisciplinary perspectives, and strengthen their capacity for innovative problem-solving. The evaluation phase confirmed the achievement of the training objectives and provided feedback for continuous improvement.

The training program of 13–17 May 2024 successfully combined theoretical and practical components, ensuring a balance between knowledge transfer and skill development. Participants gained a deeper understanding of contamination-related challenges across the food–soil–health chain and developed competencies in laboratory analysis, phytoremediation, and pathogen detection. The program enhanced interdisciplinary collaboration, encouraged innovation, and supported professional development in line with the project's objectives of fostering international cooperation and promoting sustainable, safe practices.



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