Co-funded by the European Union

INNO-SAFE-LIFE

REPORT

STUDENTS TRAINING

Organized by Slovenska Polnohospodarska Univerzita v Nitre, Slovakia

P3 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 ensure continuous professional development for specialists by addressing international and interdisciplinary themes related to soil, food, and health contamination. The program also aims to educate and support students in designing and applying innovative techniques and protocols at institutional, national, and international levels. By integrating expertise from agriculture, horticulture, health, and industry, it promotes effective knowledge transfer, sustainable practices, and responses to pressing global challenges such as climate change and antimicrobial resistance. Furthermore, it seeks to strengthen professional growth, civic responsibility, and entrepreneurial skills through a combination of theoretical and practical activities that foster active involvement and innovation.

The expected results of Work Package n°2 – Teaching, Training and Learning include the development of a highly qualified group of experts with advanced interdisciplinary and complementary skills, as well as a significant number of students prepared to generate innovative solutions in agriculture, horticulture, health, and industry. The activities will result in training reports and digital support materials to facilitate knowledge transfer and the exchange of best practices. Direct beneficiaries academic staff, researchers, industry professionals, and students will acquire both theoretical insights and practical competencies, while indirect beneficiaries, including the broader population, will benefit from improved access to skilled professionals and comprehensive educational resources. Overall, these outcomes will reinforce international cooperation, foster professional advancement, and strengthen the connections between higher education, research, industry, and society.

Students training period: 15-19 April 2024

From 15–19 April 2024, the Agrobiotech Research Centre at the Slovak University of Agriculture in Nitra (SUA) hosted the first student training under the INNO-SAFE-LIFE project. This five-day program, which followed the staff training conducted earlier in Slovakia (March 2024), focused on transferring advanced interdisciplinary knowledge in food safety, environmental toxicology, biotechnology, and plant sciences to students.

The training combined theoretical lectures with practical laboratory sessions, equipping participants with both foundational expertise and applied skills relevant to addressing soil-to-food-to-health contamination and developing sustainable solutions for human well-being.

Content of the Activities

Theoretical Sessions

- Environmental toxicology – sources of contamination and their impact on food and human health.
- Food microbiology and biotechnology – microbial safety of foods and the role of biotechnology in reducing contamination.
- Plant genetic technologies – approaches for crop improvement and resilience against environmental stress.
- Nutrition and food supplements – dietary roles, safety considerations, and toxicological aspects.
- Global challenges – climate change, antimicrobial resistance, and their interconnection with soil, food, and health.

Practical Sessions

- Laboratory analysis of food and plant samples – detection of contaminants and toxic compounds.
- Demonstrations of biotechnological methods applied in food safety and plant sciences.
- Case studies and simulation exercises – mapping contamination pathways and designing intervention strategies.
- Green technologies – valorisation of plant resources for sustainable food production.
- Student-led presentations – innovative proposals for reducing pollution and improving human health outcomes.

Contribution to WP Objectives

The student training at Agrobiotech contributed directly to the objectives of **Work Package n°2 – Teaching, Training and Learning** by:

- Ensuring continuous education and training of students in international and interdisciplinary themes.
- Supporting students in developing and applying innovative techniques and protocols relevant to agriculture, horticulture, health, and industry.

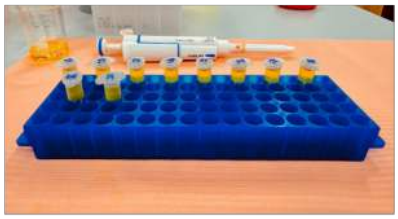
It also promoted key cross-cutting principles:

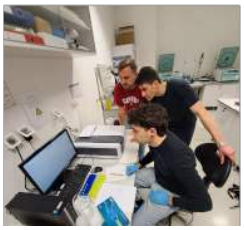
- **Interdisciplinarity:** Linking soil pollution, plant sciences, food safety, and human health.
- **Sustainability:** Introducing green methods and protocols for resource-efficient practices.
- **Digitalization:** Applying digital tools and protocols in research and training.
- **Inclusion and diversity:** Engaging students from varied academic and cultural backgrounds.

Expected Results

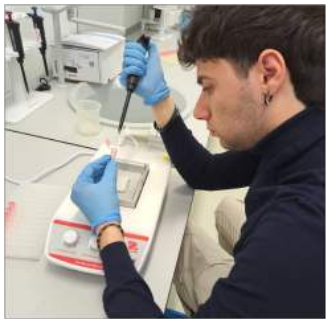
- Formation of a group of well-prepared students with interdisciplinary expertise.
- Increased awareness of contamination pathways and their impact on human health.
- Strengthened laboratory and analytical skills through applied practice.
- Development of innovative thinking and entrepreneurial awareness among students.
- Enhanced international collaboration and preparation of students as future specialists and change agents.

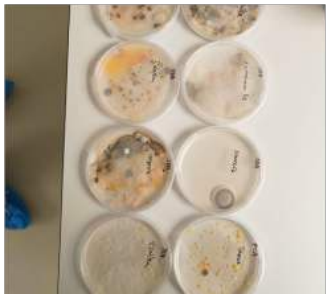
The student training at Agrobiotech, Nitra, successfully combined theoretical knowledge with practical experience, equipping participants with complementary expertise in food safety, toxicology, biotechnology, and sustainable practices. The program directly supported the objectives of Work Package n°2 by fostering professional development, civic engagement, and innovation, while preparing students to act as multipliers of knowledge and awareness within their academic, social, and professional environments.

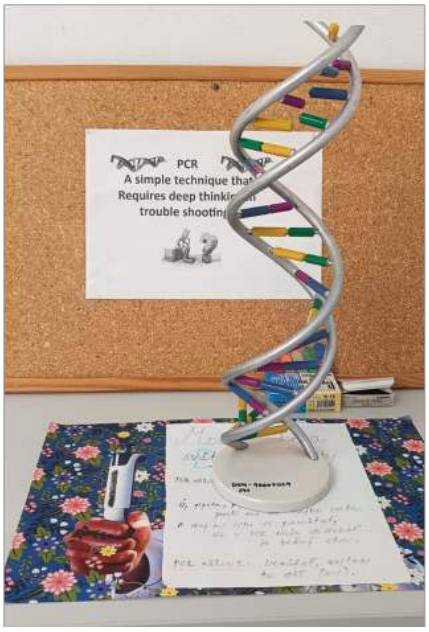





AGROBIOTECH



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