



Project ERASMUS K2: "Cooperation to implement innovative methods for the assessment of medicinal plants with central roles in pharmaceutics, agriculture and nutrition" (EURO-PLANT-ACT)

KA220-HED - Cooperation partnerships in higher education Contract No. 2022-1-RO01-KA220-HED-000088958

## **REPORT - TRAINING FOR EXPERTS**

University of Calabria (P3)

11.09.2023 - 15.09.2023

Between September 11-15, 2023, expert training took place at the University of Calabria, P3, Rende, Italy. This session was attended by 18 specialists, with four specialists from each university involved in the project and two specialists from the industry partner, as follows:

- Coordinator (UMFVBT) Cristina Adriana Dehelean, Daliana Ionela Minda, Ioana Gabriela Macaşoi, and George Andrei Drăghici (4 specialists in pharmacy/medicine and toxicology (pharmacological-toxicological evaluations)).
- P1 (USVT) Ersilia Alexa, Georgeta Pop, Monica Negrea, and Ileana Cocan (4 specialists in the food industry).
- P2 (UNIOS) Karolina Vrandecic, Jasenka Cosic, Renata Balicevic, and Marcela Speranda (4 specialists in agriculture).
- P3 (UNICAL) Filomena Conforti, Giancarlo Statti, Fedora Grande, and Maria Stefania Sinicropi (4 specialists in pharmacy and nutrition).
- P4 (ROMPAN) Daniela Voica and Dana Avram (online) (2 specialists in the food industry).

In accordance with the activities outlined in the project proposal, theoretical and practical demonstration sessions were conducted involving all attendees. The focus was on the extraction of bioactive compounds from medicinal plants and innovative methods for the physicochemical characterization of extracts from medicinal plants and





essential oils with a central role in nutrition. The event agenda included theoretical sessions during the first three days and practical sessions in the last two days.

The first day included: Registration of participants, a welcome speech by the project manager of P3, Prof. Filomena Conforti; Presentation of the host institution, the University of Medicine and Pharmacy "Victor Babes" in Timisoara, Faculty of Pharmacy; Discussions about the event program and organizational issues.

On the second day, a brief presentation of the EURO-PLANT-ACT project was made, followed by the presentation "Toxicological aspects of plant products used as food supplements" (Project Manager Prof. Cristina Dehelean). Presentations continued as follows: The use of medicinal plants as added value ingredients in the industry of functional bakery and pastry products (P1 – USVT, Prof. Ersilia Alexa), Antifungal properties of essential oils against plant pathogens (P2 – UNIOS, Prof. Jasenka Cosic, Prof. Karolina Vrandecic), Qualitative and quantitative determination of phytocomplexes (P3 – UNICAL, Prof. Filomena Conforti), Bakery products with medicinal plants (P4 – ROMPAN, Engineer Daniela Voica).

The third day was dedicated to experimental stages and included a field trip to Vibo Valentia for a presentation by the CAFFO Group, showcasing the distillery and production plants and crops.

On the fourth day, the following topics were discussed: *Preliminary studies on the pharmaco-toxicological effects exercised by the total extract of Lavandula angustifolia* (CO – UMFVBT, Lecturer Daliana Minda), *The activity of medicinal plants against pathogenic bacteria prevalent in the food industry* (P1 – USVT, Monica Negrea, Ileana Cocan), *Factors influencing the herbicidal and allelopathic potential of plants* (P2 – UNIOS, Renata Balicevic, Marija Ravlic), *Influence of environmental factors on the phytochemical composition of a natural extract* (P3 – UNICAL, Prof. Giancarlo Statti), *Pastry products with medicinal plants as functional ingredients* (P4 – ROMPAN, Dana Avram).

At the end of each theoretical day, a working group meeting took place, and the days concluded with discussions and conclusions regarding the topics covered.

On the last day of the training, practical activities were coordinated by Prof. Filomena Conforti, highlighting *Innovative experimental methods* – extraction, separation, and quantification of phytochemicals.





The expert training program achieved its goal of exchanging best practices and training specialists from complementary fields in managing the central role of medicinal plants. Practical and didactic activities were ensured with the participation of professors and specialists from each project team. Emphasis was also placed on the importance and development of entrepreneurship for more active participation in society and increasing professional development opportunities. The visit to the CAFFO Group provided a good opportunity to raise awareness of the importance of entrepreneurship in the field. Following the training activities, knowledge assessment tests were developed, participation certificates were issued, and each participant completed a questionnaire to evaluate the actions and knowledge gained.

The associated partners ensured the link between proper professional training and the labor market. Both E-lite Nutrition and Favisan supported the theoretical activities aimed at consolidating theoretical and practical knowledge, significantly developing skills in innovation and specific applications in the field of medicinal plants, incorporating them into final products with multiple uses: phytotherapy, nutraceuticals, agriculture (through actions protecting the environment and natural resources).

The direct beneficiaries of the expert training program were project members selected during the project submission, based on skills in the management of medicinal plants through rational cultivation, and the use of plant products in food, nutrition, and agriculture. The outcome of this learning activity, expert training programs, is also reflected in the deepening of knowledge among specialists in complementary fields, thanks to the interdisciplinary and multicultural exchange of knowledge.









