

**STAFF MOBILITY FOR TEACHING ASSIGNMENT
ERASMUS+ PROGRAMME
FROM PROGRAMME COUNTRIES TO UNIVERSITY OF LIFE SCIENCES IN LUBLIN
PROJECT NO.: 2023-1-PL01-KA131-HED- 000119757**

I was assigned to the program in Lublin between 13 and 17 May 2024 and taught the first/second classes and MSc degrees of the students, Faculty of Pharmacy with Medical Analytics Division of Lublin University by the entitled topics; 'The Impact of Climate Change on secondary Metabolites of Certain Medicinal and Aromatic Plants (MAPs)', 'Cultivation practices of Certain Annual and Perennial MAPS and MAP Cultivation and Production in Türkiye', 'The Advantages of Using MAPs as Intercrops and Mixcrops and Why do we need to use standardized MAP materials?' and 'The Contribution of Agricultural Production in Food Industry'. There was a great interest to the classes. Students contributed to the classes and asked questions. I've also shared my contact info by the students for their further questions and mentioned about the exchange program of Türkiye. During this visit I've also introduced by Assoc. Prof. Eva ZALEWSKA from Department of Vegetable and Herbs, which also taught recently the first classes on Medicinal and Aromatic Plants taxonomy and cultivation. We've also discussed about future collaborations and visited the new greenhouse with her.

As well as benefit the individual's professional development, that Erasmus mobility contributed to the wider internationalization and modernization strategies at the home University. The mobility provided valuable experiences which will benefit both education purpose as well as practical ones, contributes to enhanced the transfer of knowledge, learning from shared experiences, the acquiring of new practical skills. The overcome training was relevant basis for establishing a higher scientific area between host institution as well as sending one.

During the visit I've also come together by the Phytopathology Society members and discussed about soil pathogenes, microbials and about the quarantine measures of the two countries.

I've also have the opportunity often come together by Assoc Prof. Beata ZIMOWSKA and planned to submit a paper recently on 'the isolated pathogenes on the cultivation area of Camelina Intercropped by Medicinal Plants' and invited her next term for further collaborations to Ankara.

Prof. ZIMOWSKA also accompanied us to visit the historical places of Lublin (Kazimierz Dolny and Zamoyskish W Kozlowce Museum).

I would like to take this opportunity to thank to the Erasmus + programme From Program Countries to University of Life Sciences in Lublin (Project No.: 2023-1-PL01-KA131-HED- 000119757).

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CONCLUSION

- While different biotic and abiotic stress factors have a reducing effect on yield and biomass production, they promote the formation of secondary metabolites in different ways.
- Plant secondary metabolites with noteworthy biological activity are considered an alternative to most synthetic drugs represent highly economically valuable products and can be used as high-value chemicals such as drugs, fragrances, flavors, insecticides, dyes, etc.
- There is a crucial demand for new pharmaceutical agents to overcome serious illnesses and new sources of bioactive secondary metabolites with novel activities. Considering those effects, they are also an important input that provides added value to semi-processed or final products.
- Positive changes in phenolic components, antioxidant activities, flavonoids, tannins, pigments, saponins, PAL enzymes, carotenoids, and in glycosides of plants have been recorded in those plants exposed to UV-B radiation, extreme temperatures, to different irrigation regimes and irrigation stresses, to salinity, and to heavy metals.

