## **Summary:**

## Ethnobotanical and ethnopharmacobotanical studies in Transylvania

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The **ethnobotanical and ethnopharmacological studies** play a significance role in the recent medicinal plant researches nowadays. These studies can be carried out by field work and by comparison with official references mostly on the settlements isolated from media and other sources in different regions of the world. Field works should start with the evaluation of the infrastructure, the social parameters and medical service of the inhabitants at the selected areas. The further steps include the interviews, the plant collection and identification, and the documentation of the local ethnobotanical data of the regions.

Recently, several valuable ethnobotanical data can be found besides the unidentified plant taxa of the tropical and subtropical areas. The flora elements of Central Europe seem sometimes not so "exotic" scientifically, additionally, based on the civilisation' effects, the valuable knowledge of the local people decreases and changes continuously, which is e.g. due to the integration of the data of media sources and official references. This fact provides an image about the recent position of the traditional medicine at various regions, however, the main aim of the research is to document and preserve the archaic elements of the selected areas.

In **Transylvania**, part of Romania, the first ethnobotanical works have been published in the 1960-1980's mostly in Hungarian and Romanian. Our ethnobotanical studies started in cooperation with colleagues of other institutes, Phd students and students in 2007. The following regions were studied ethnobotanically in the country: Uz-valley (Cinod, Egershec), Covasna county (11 settlements), Lunca de Sus, and Homorod-valley (7 villages). The interviews were performed with 300 informants of these areas **between 2007 and 2013** (~400 hours recorded, 150 days in field). Altogether **300 plant species** were identifed and listed with local ethnobotanical data including the vernacular plant names, place and date of collection, used parts and indications, and the connected beliefs.

Among the plants used in the traditional medicine in each studied village, about 10% of the listed taxa can be qualified as a "new drug or data" phytotherapeutically, which refer to further **histological**, **phytochemical and pharmacological analyses of the selected plants**. This selection should be based on a preliminary comparison between the collected records and the data of official medicinal source, and requires a deep investigation and evaluation of these references.

Possibilities for publication in ethnobotany: The international journals prefer the manuscript of data collection in comparison with earlier data of the study area, or compared to the records of other countries. Based on the requirement of the close translation, correct results of Transylvanian field works can be published mostly in Hungarian. Among our collecting trips from 2008 to 2013, the following works were published: 3 Hungarian and 10 English articles, 1-1 Hungarain and English book chapter, 6 Hungarian and 7 English posters, as well as 8 Hungarian and 5 English oral presentations at various Hungarian and international conferences. Altogether 2 thesis were defensed and 3 others are preparing in the topic by biologist, pharmacist and medical students. The study also presents among our PhD subjects (1 current and 2 preparing studies).

**Scientific cooperations** are performed with collegaues of several **international institutes** (Department of Pharmacognosy, University of Oradea; Department of Pharmacognosy,

University of Targu Mures; Department of Hungarian Ethnography and Anthropology, University of Babeş-Bolyai of Cluj-Napoca; University of Gastronomic Sciences Fr. Pollenzo, Bra (CN) Italy; School of Biosciences and Veterinary Medicine, University of Camerino, Italy; Department of Ecotoxicology, University of Rzeszów, Kolbuszowa, Poland; Institute for Linguistic Studies, Russian Academy of Sciences, Saint-Petersburg, Russia; Estonian Literary Museum Tartu, Estonia; Center for the Study of Human Health, Emory University Atlanta, USA). According to the planned analytical studies of the selected and collected plants, there are **cooperations with different institutes at University of Pécs** (Department of Plant Biology, Institute of Chemistry, Department of Medical Microbiology and Immunology, Institute of Laboratory Medicine, University of Pécs).

**Successfull applications, grants and fellowships** connected to the subject: Research Application, University of Pécs (2010-2012); Application of the Faculty of Medicine, University of Pécs: Support for the participation at the Second Eastern European Ethnobiology Workshop (Királyrét, 2011); CEEPUS Freemover Scholarship grants in Romania (Cluj Napoca: 01 March – 30 June 2012; Oradea: 01 June – 31 August); Grant for researchers and teachers of Faculty of Medicine, University of Pécs for short study (Comenius University, Department of Pharmacongosy and Botany, Bratislava Slovakia, May – June 2014); OTKA (Hungarian Scientific Research Fund, 108534) grant – Ethnobotanical studies in Transylvania (2013-2016).

The traditional elements of the archaic knowledge about medicinal plants decrease based on the social and environmental changes of the selected ethnic groups. The wide data collections of the Northern, Eastern and Central European studies promote the publication possibilities of the subject providing comparisons between the collected data of various ethnic groups of other countries.

However, I work at several reserach topics at the Department of Pharmacognosy at the University of Pécs, including field and laboratory works, several courses in Hungarian and English, and thesis at other subjects are also preparing with students, the research topic ethnobotany is the most important subjects in my work, therefore the Transylvanian ethnobotanical studies will be planned and continued in the future, too.

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