

Summer Research Internship Project Proposal

Project Topic	Isolation of chemical constituents of <i>Sorbus domestica</i> fruits with potential antidiabetic properties		
Name	PharmDr. Milan Malaník, Ph.D.	Field	Phytochemistry
Department	Department of Natural Drugs	Keywords	<i>Sorbus domestica</i>

Description of the Project (overview, expected outcomes, reason for research, proposed outcomes for student(s))

Sorbus domestica is used in folk medicine as an antidiabetic agent, however, scientific evidence about its activity is almost lacking. Thus, this phytochemical study is focused on the isolation of secondary metabolites, especially triterpenes, that can contribute to the antidiabetic properties of *Sorbus domestica*. The student will become acquainted with various chromatographic techniques (TLC, CC, HPLC) in order to isolate pure compounds. The acquired knowledge will serve as the starting point for the work in the phytochemical laboratory.

Student Requirements (prerequisites, experience, acceptable fields of study, etc.)

- Basic knowledge about chromatographic techniques (TLC, CC, HPLC)
- Enthusiasm and interest in the work in phytochemical laboratory

Proposed responsibilities of the student(s)

- Preparation of the samples
- Chromatographic separation
- Preliminary identification of pure compounds

Additional important information (max. number of students, additional staff/faculty involved, etc.)

- Preferably only one student