

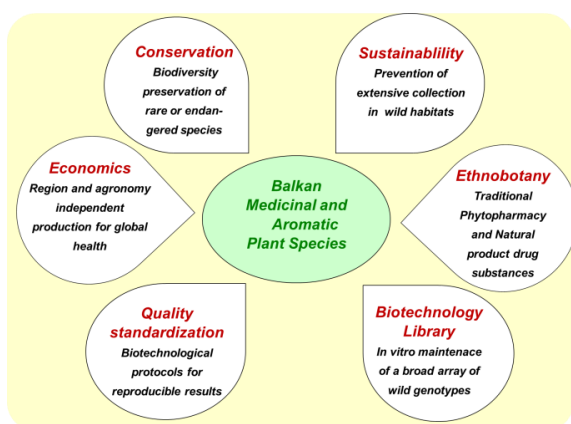


BULGARIAN-SWISS COOPERATION PROGRAMME
БЪЛГАРО-ШВЕЙЦАРСКА ПРОГРАМА ЗА СЪТРУДНИЧЕСТВО

Ex situ conservation and standardized biotechnological yield of potential phytopharmaceuticals of valuable Balkan medicinal plant germplasm

Starting Date 01.03.2013
Duration 36 Months
Discipline Life Sciences/
Biotechnology

Main Goals



Mutual visits: Bulgarian and Swiss Team in Wädenswil 2014. From left: , M. Todorova, A. Trendafilova, E. Wolfram, K. Danova, S. Krumova, T. Merseburger

Activities

- Development of suitable fingerprint bioprocess control methods to assess secondary metabolite content and potential biological activity of *ex situ* and *in vitro* derived plant biomass
- Assessment of the phytopharmaceutical potential of the selected medicinal plants
- *In vitro* cultivation of selected medicinal and aromatic plants from the Balkan Region for conservation purposes. Optimization of culture conditions in order to stimulate the production of prospective phytopharmaceuticals *in vitro*, leading towards standardized biotechnological protocols for the delivery of high content of target active constituents

Expected results

- Valorisation for pharmaceutical, nutritional or cosmetic purposes of the selected medicinal plants from the Balkan region by metabolic and activity profiling
- Biotechnological protocols for their *in vitro* cultivation of high content tissues and suspended plant cell biomass

Swiss Coordinator

Prof. Dr. Beat Meier
Institute of Biotechnology/
Phytopharmacy Research Group
Zürich University of Applied Sciences
(ZHAW)
wola@zhaw.ch
www.ibt.zhaw.ch/phytopharmazie



Bulgarian Coordinator

Dr. Kalina Danova
Institute of Organic Chemistry with
Centre of Phytochemistry
Bulgarian Academy of Sciences

k_danova@abv.bg
<http://www.orgchm.bas.bg/>

www.snf.ch

www.mon.bg



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