

## MEDICINAL PLANTS AND SPICES (3ME13NAK01B)

### BSc in Horticultural Engineering, 2nd year

Academic year of 2018/2019, spring semester

#### Course schedule

Date	Lectures (2 hours)	Date	Seminars (2 hours)
<b>February 6th</b>	Definition of drug and product categories made of medicinal and aromatic plants	<b>February 6th</b>	Botanical features of medicinal plants and spices (anatomy, taxonomy and occurrence)
<b>February 13th</b>	Active compounds of medicinal and aromatic plants	<b>February 13th</b>	Demonstration of active compound isolation from different drug types
<b>February 20th</b>	History of curing, traditional and up-to-date therapeutic fields of application of medicinal plants	<b>February 20th</b>	Laboratory quality control of herbal drugs
<b>February 25th – March 1st Field practices</b>			
<b>March 6th</b>	Aspects of medicinal plant collection from wild habitats	<b>March 6th</b>	Flower drug producing wild-crafted medicinal plant species (elderberry, hawthorn, linden tree)
<b>March 13th</b>	Primary processing of medicinal plants	<b>March 13th</b>	Herba drug producing wild-crafted medicinal plant species (goldenrod, <b>yarrow</b> , <b>St. John's Wort</b> , horsetail)
<b>March 20th</b>	Medicinal plant producing systems and regions worldwide	<b>March 20th</b>	Root, bark or fruit producing wild-crafted medicinal plant species ( <b>marshmallow</b> , horse chestnut, <b>common juniper</b> , <b>wild rose</b> )
<b>March 27th</b>	Quality assurance systems in medicinal plant production	<b>March 27th</b>	Leaf drug producing wild-crafted medicinal plant species ( <b>nettle</b> , plantain, <b>blueberry</b> , <b>mistletoe</b> )
<b>April 3rd</b>	Economy and commerce of medicinal plants and products	<b>April 3rd</b>	The most important tropical spices worldwide (black pepper, cinnamon, vanilla, ginger, nutmeg, clove bud)
<b>April 8-12th Field practices</b>			
<b>April 17th</b>	Protected and endangered medicinal and aromatic plants. Gene reservation. Introduction of medicinal plant species into cultivation	<b>April 17th</b>	Tropical medicinal plants collected in south-east Asia
<b>April 24th</b>	Visit in the Botanical Garden of the Eötvös Lóránd University		
<b>May 1st Holiday</b>			
<b>May 6-10th Field practices</b>			

**Lectures:** **Wednesday (room G. 6): 12.00-13.45 h**

**Practices:** **Wednesday (room G. 6): 14.00-15.45 h**

**Field practices in the Medicinal Plant Unit of the Experimental and Research Farm (Soroksár): April 9th, 2019; May 6th and 8th (plant identification test)**

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**Literature recommended**

- Bernáth J., Gosztola B., Pluhár Zs., Radácsi P., Szabó K., Zámoriné Németh É. (2018) Medicinal plants and spices (e-book chapters available for our students on the website of the Department of Medicinal and Aromatic Plants by password):  
[http://medplant.hort.sziu.hu/sites/default/files/files/ENGLISH/Education/Training%20materials/MAP%20production/MAP\\_Training%20material\\_F.pdf](http://medplant.hort.sziu.hu/sites/default/files/files/ENGLISH/Education/Training%20materials/MAP%20production/MAP_Training%20material_F.pdf)
- Handouts of several lectures (distributed in pdf)
- Hornok, L. (ed): Cultivation and processing of medicinal and aromatic plants. Academic Publisher, Budapest, 1991.

**Criteria to fulfil the course (to obtain term mark)**

**Requirements (terms to fulfill before exam):**

- Class attendance is compulsory on the practical course, where max. 3 absence (25%) is accepted
- Participation on the field practices organized by the department in April and May in the Experimental and research Farm (Soroksár)
- 3 individual field practice days organized by the Experimental and Research Farm (Soroksár)
- Successful plant identification test on 10 plants in the course of field practices

**Exam:**

- an exam consist of a written and an oral part, where a successful written part is a prerequisite of the oral exam
  - written part includes
    - drug identification og 6 plant drugs (indicating the Latin and English drug name with chief compound)
    - plant identification from a photo (where the Latin and English name, plant family and life-form is to be given by the student)
  - oral part includes 2 questions from the list available on the Department website
- if the written part is failed, the student cannot participate in the oral part of the exam and the complete exam is to be repeated
- if the written part is successful but the oral part is failed, the complete exam is to be repeated

Budapest, 28th January, 2019

**dr. Zsuzsanna Pluhár**  
associate professor  
course instructor