Course Unit Descriptor

Study Programme: Phytomedicine

Course Unit Title: THE BASICS OF HERBOLOGY

Course Unit Code: 19.FTM018

Name of Lecturer(s): Full Prof. Bojan Konstantinović, PhD; Assoc. Prof. Milena Popov, PhD

Type and Level of Studies: Undergraduate academic studies

Course Status (compulsory/elective): Compulsory

Semester (winter/summer): Winter

Language of instruction: English

Mode of course unit delivery (face-to-face/distance learning): face-to-face

Number of ECTS Allocated: 4

Prerequisites: The student is supposed to have passed the final exam of the course Field and vegetable crops prior to taking the final exam.

Course Aims:

The recognition of the economically most important weed species under the conditions of the field and vegetable crops production, in aquatic ecosystems and the ruderal habitats; the relation of the weeds to the abiotic and biotic factors; the recognition of the weeds in the cotyledon stage, as well as the identification of the reproductive organs.

Learning Outcomes:

The students which have passed the course The basics of herbology will be able to correctly identify the economically most important weeds of the agroecosystems and ruderal habitats in the early, as well as in later stages of development, which is the base knowledge a student should have in order to choose the appropriate control measures and time of their application.

Syllabus:

Theory

The historical significance, term, definition and damage of the weeds. The positive effects of the weeds. Weeds – the medicinal plants. Weeds – the poisonous plants. The biological classification of the weeds. The weeds propagation and survival in the adverse conditions. Generative propagation. Vegetative propagation. The weed seeds and fruits dispersion. The dormancy of the weed seeds – the definition and dormancy types. The ecology of the seed germination. The modeling of the dormancy. The examination of the weeds "seed bank". The strategy of the weed seeds sampling. The importance and types of the "seed bank". Spatial distribution. The dynamic of the "seed bank". The inputs of the "seed bank". The seeds loss, longevity and maturation in the soil. The modeling of the weeds "seed bank". The dynamic models. Weeds community. The classification of the phytocoenoses. The methods for sampling and studying the plant communities. The anthropogenic plant communities in the narrow and broad sense.

Practice

Weeds as the specific group of plants. Weeds division. Weeds characteristics. Negative impacts of the weeds. Significance of the weeds. Weeds reproduction. Physical properties of the weed seeds. Methods for identification of the weeds. Familiarizing with the most important weed species. Familiarizing with the economically important weed seedlings. The study and research work will teach the students to recognize the weed species and determine the weeds taxonomy by using the determination keys. The "seed bank" of the weeds.

Required Reading:

Konstantinović, B. (2008): Korovi i njihovo suzbijanje, Poljoprivredni fakultet, Novi Sad

Konstantinović, B. (2011): Osnovi herbologije i herbicidi, Poljoprivredni fakultet, Novi Sad

Konstantinović, B. (2014): Osnovi herbologije i korovi urbanih sredina, Poljoprivredni fakultet, Novi Sad

Konstantinović, B., Popov, M., Samardžić, N. (2021): Osnovi herbologije. Praktikum, Univerzitet u Novom Sadu, Poljoprivredni fakultet, Novi Sad.

Weekly Contact Hours:	**Lectures:** 4	**Practical work:** 3

Teaching Methods:

Lectures and Practical classes

Knowledge Assessment (maximum of 100 points):

Pre-exam obligations	points	**Final exam**	points
colloquium	20	oral exam	60
tests	20		