Study Programme: Organic agriculture

Course Unit Title: WEEDS AND BIOPESTICIDES

Course Unit Code: 19.ORG012

Name of Lecturer(s): Assoc. Prof. Bojan Konstantinović, Assoc. Prof. Dragana Šunjka

Type and Level of Studies: Undergraduate academic studies

Course Status (compulsory/elective): compulsory

Semester (winter/summer): summer

Language of instruction: serbian

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

Number of ECTS Allocated: 5

Prerequisites: none

Course Aims:

Identifying the most economically important weed species in the organic production and the possibilities of their control (mechanical and integral methods). Use of biopesticides in organic agricultural production.

Learning Outcomes:

The students who have passed the course Weeds and biopesticides will be able to determine and identify the most important weed species in organic agriculture. After the course, they would be able to choose and apply the mechanical and integrated weed control measures, as well as biopesticides.

Syllabus:

Theory

The historical significance, the term, the definition, and the damage of the weeds. Weeds propagation. Seed dormancy and soil "seed bank". The characteristics of the soil and weeds. Allelopathy. The medicinal and poisonous plants. Weeds community. Phytocoenology. Anthropogenic plant communities. The classification of the weed control measures. The importance of integrated control measures. Indirect weed control measures. Direct weed control measures. Mechanical control measures. Biological weed control.

Biopesticides – the significance, definitions, and classification, type of formulation. Modes of action of biofungicides, bioinsecticides, bionematocides, bioherbicides. Plant protection in organic agricultural production. Legislative in the field of biopesticides. Use and application of biopesticides. Advantages and disadvantages of their application. The status of biopesticides in crop protection. Risk assessment in biopesticides application.

Practice

Familiarizing with the most important weed species. Familiarizing with the seeds and seedlings of economically significant weeds. Exercises successively follow the lectures, highlighting weed morphology. Formulations of the biopesticides and the type of application. Evaluation of the biological effects of biopesticides and their use.

Required Reading:

Konstantinović, B. 2008. Korovi i njihovo suzbijanje, Poljoprivredni fakultet, Novi Sad;

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

Vuković, S., Šunjka, D. 2020. Korovi i biopesticidi (deo BIOPESTICIDI). Praktikum, Univerzitet u Novom Sadu, Poljoprivredni fakultet.

Vuković, S., Šunjka, D. 2021. BIOPESTICIDI. Udžbenik. Univerzitet u Novom Sadu, Poljoprivredni fakultet.

Weekly Contact Hours	: Lecture	es: 3	Practical work: 2	
Teaching Methods:	·			
Lectures and Practical c	lasses.			
Knowledge Assessmen	t (maximum of 10	0 points):		
Pre-exam obligations	points	Final exam	points	
Active class participation	-	colloquium	40	
Practical work	-	oral exam	60	
Preliminary exam(s)	-			
Seminar(s)	-			
The methods of knowled project presentation, sen	0	y differ; the table presents	only some of the options: writte	n exam, oral exam,