

Study Programme: Organic agriculture			
Course Unit Title: Weeds and biopesticides			
Course Unit Code: 19.ORG012			
Name of Lecturer(s): Dragana B. Šunjka, Milena M. Popov			
Type and Level of Studies: Bachelor studies			
Course Status (compulsory/elective): Compulsory			
Semester (winter/summer): Summer			
Language of instruction: English			
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). Application of biopesticides (biofungicides and bioinsecticides) in the 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 the organic production, as well as to apply the mechanical and integrated weed control measures, including the possibility of the biopesticides application in control of harmful organisms in organic agriculture.			
Syllabus: <i>Theory</i> The historical significance, the term, 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 the integrated control measures. Indirect weed control measures. Direct weed control measures. Mechanical control measures. Biological weed control. Importance, characteristics, classification, and formulations of biopesticides. Mode of action. Prevalence and application of biofungicides and bioinsecticides. Advantages and disadvantages of their application. Status of biopesticides in plant protection. Risk assessment of biopesticide application. Legal regulations in the field of biopesticides in organic agricultural production. Introduction of information technologies. <i>Practice</i> Familiarizing with the most important weed species. Familiarizing with the seeds and seedling of the economically significant weeds. Exercises successively follow the lectures, highlighting the weed morphology. Use of biopesticides. Formulations and mode of action. Evaluation of the efficacy of biopesticides (bioinsecticides and biofungicides).			
Required Reading: Vuković Slavica, Šunjka Dragana - Biopesticidi. Udžbenik, Univerzitet u Novom Sadu, Poljoprivredni fakultet, 2021. Vuković Slavica, Šunjka Dragana - Korovi i biopesticidi (deo BIOPESTICIDI). Praktikum, Univerzitet u Novom Sadu, Poljoprivredni fakultet, 2020. Konstantinović Bojan - Osnovi herbologije i korovi urbanih sredina, Univerzitet u Novom Sadu, Poljoprivredni fakultet, 2014. Konstantinović Bojan, Popov Milena, Samardžić Nataša - Osnovi herbologije. Praktikum, Univerzitet u Novom Sadu, Poljoprivredni fakultet, 2021.			
Weekly Contact Hours: 5	Lectures: 3	Practical work: 2	
Teaching Methods: Lectures and Practical classes.			
Knowledge Assessment (maximum of 100 points):			
Pre-exam obligations	points	Final exam	points
Active class participation	-	written exam	40
Practical work	-	oral exam	60
Preliminary exam(s)	-	
Seminar(s)	-		
The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.			