

Study Programme: Field and vegetable crops			
Course Unit Title: Phytopharmacy and weed control			
Course Unit Code: 19.RIP015			
Name of Lecturer(s): Full Prof. Slavica Vuković, PhD; Assoc. Prof. Nataša Mandić, PhD; Teaching Assistant Antonije Žunić, PhD; Teaching Assistant Tijana Stojanović, MSc			
Type and Level of Studies: Undergraduate academic 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: The basic properties of the pesticides (formulation, mode of action, the conditions of the application, the effects fungicides and zoocides, consequences of the application), as well as the identification of the most economically important weed species in field and vegetable crops and the possibilities of their control.			
Learning Outcomes: The students who have passed the subject Phytopharmacy and weed control will get the basic knowledge of the Phytopharmacy concerning the properties of the pesticides, the conditions and the manner of application, as well as their possible consequences in field and vegetable crops production. Also, they will be able to determine and identify economically important weed species in field and vegetable crops, as well as the most effective manner and time of their control, based on the acquired knowledge.			
Syllabus: <i>Theory</i> Methods and conditions of application of fungicides and zoocides in field and vegetable crops, as well as assessment of effects depending on the purpose of pesticide application. Seed treatment, conditions for mixing pesticides, the importance and role of biopesticides and non-pesticide substances, consequences of the application of plant protection products and conditions for forming an application strategy. Indirect and direct weed control measures. Level of economic damage. Critical period of weed infestation. Weeds and their control in small grains, maize, sunflower, soybean, oilseed rape, sugar beet, vegetable crops (classification according to the purpose; physicochemical and biological properties). <i>Practice</i> Determination of toxicity and efficacy of plant protection products (fungicides and zoocides); quality of treated seeds; phytotoxicity; conditions for mixing pesticides and non-pesticide substances; importance of strategy in the application of plant protection products. Positive and negative effects of the weeds. Weed seedling identification. Methods for weed identification. Overview of the most important weed species in field and vegetable crop production. Assessment of the biological efficacy of herbicides according to the EPPO methods.			
Required Reading: 1. Janjić, V.: Fitofarmacija. Društvo za zaštitu bilja Srbije, Beograd, 2005. 2. Inđić, D., Vuković, S.: Praktikum iz Fitofarmacije (fungicidi, zoocidi), Poljoprivredni fakultet, Novi Sad, 2012. 3. Vuković, S., Šunjka, D.: Biopesticidi, Poljoprivredni fakultet, Novi Sad, 2022. 4. Konstantinović, B.: Osnovi herbologije i herbicidi, Poljoprivredni fakultet, Novi Sad, 2011. 5. Konstantinović, B., Konstantinović, Bo: Osnovi herbologije i korovi urbanih sredina, Poljoprivredni fakultet, Novi, Sad, 2014. 6. Konstantinović, B., Popov, M., Samardžić, N.: Osnovi herbologije. Praktikum, Univerzitet u Novom Sadu, Poljoprivredni fakultet, Novi Sad, 2021			
Weekly Contact Hours: 4+2	Lectures: 60	Practical work: 30	
Teaching Methods: Lectures and Practical classes			
Knowledge Assessment (maximum of 100 points):			
Pre-exam obligations	points	Final exam	points
Active class participation	10	written exam	
Practical work	20	oral exam	70
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.			