

<b>Study Programme:</b> Agronomy			
<b>Course Unit Title:</b> Biological methods for pesticides residues analyses			
<b>Course Unit Code:</b> 19.AGR051			
<b>Name of Lecturer(s):</b> Full Professor Slavica M. Vuković, Associate Professor Dragana B. Šunjka			
<b>Type and Level of Studies:</b> PhD studies			
<b>Course Status (compulsory/elective):</b> Elective			
<b>Semester (winter/summer):</b> Summer			
<b>Language of instruction:</b> English			
<b>Mode of course unit delivery (face-to-face/distance learning):</b> Face-to-face			
<b>Number of ECTS Allocated:</b> 7			
<b>Prerequisites:</b> -			
<b>Course Aims:</b> The aim of the course is to allow students to acquire knowledge and overcome methods for the biological analysis of pesticide residues in soil, water and plant material.			
<b>Learning Outcomes:</b> Development of students' capacity for independent scientific work based on biological methods in the field of pesticide science.			
<b>Syllabus:</b> <i>Theory</i> Test organisms, roll and significance; Sampling methods of contaminated material (water, sediment, soil, plant material); Biological methods for detection, quantification and assessment of pesticides bioavailability; Comparative analysis depending on methods and test organisms; Advantages and disadvantages; Statistical analysis; Analysis of results from bioassays. <i>Practice</i> Application of biological methods for the analysis of pesticide residues in real samples; Data processing.			
<b>Required Reading:</b> 1. Šovljanski, R., Lazić, S.: Osnovi fitofarmacije, Poljoprivredni fakultet Novi Sad, 2007. 2. Indić, D., Vuković, S.: Praktikum iz Fitofarmacije (fungicidi, zoocidi), Poljoprivredni fakultet, Novi Sad, 2012. 3. Мелеховой, О.П., Егоровой, Е. И.: Биологический контрол окружающей среды. Биоиндикация и Биотестирование. Академия, Москва, 2007. 4. MacBean, C. (Ed): The Pesticide Manual (16th ed). British Crop Protection Council, Farnham, 2012. 5. EPPO Standards, Guidelines for the efficacy evaluation of plant protection products, Vol 1-3, 2004. 6. Copping, L.G.: The Manual of Biocontrol Agents, BCPC, UK, 2009.			
<b>Weekly Contact Hours:</b> 4+4	<b>Lectures:</b> 4x15	<b>Practical work:</b> 4x15	
<b>Teaching Methods:</b> Lectures, Practical classes, Research work			
<b>Knowledge Assessment (maximum of 100 points):</b>			
<b>Pre-exam obligations</b>	points	<b>Final exam</b>	points
Active class participation		written exam	70
Practical work		oral exam	
Preliminary exam(s)		.....	
Seminar(s)	30		
The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.			