

Study Programme: Phytomedicine			
Course Unit Title: Biological effects of fungicides and insecticides			
Course Unit Code: 19.FT1022			
Name of Lecturer(s): Full Professor Slavica Vuković, Associate Professor Dragana Šunjka			
Type and Level of Studies: Undergraduate academic study			
Course Status (compulsory/elective): Elective			
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: 6			
Prerequisites: None			
Course Aims: The aim of the course is to provide students with basic knowledge about biological effects of pesticides, to master methods and evaluation methods, calculation of data and analysis of results.			
Learning Outcomes: Acquired knowledge will contribute to training of professionals to work in the field of plant protection-application of pesticides, assessment of the effects, analysis of the results and presentation of valid data.			
Syllabus: <i>Theory</i> Different methods for the determination of fungicides and insecticides effects. Standard methods (EPPO) for the determination of pesticide efficacy in the field (production) conditions. Basic principles of biological tests. Toxic and side effects of fungicides and insecticides. Toxic effects of pesticides and their importance, rating and/or evaluation and comparability of data. Testing, analysis and presentation of data (results). <i>Practice</i> Standards and methods (EPPO) for pesticide testing under field conditions. The biological compatibility of fungicides, insecticides and non-pesticidal compounds. Determination of pesticide toxicity (probyt analysis, LD ₅₀ /LC ₅₀ и LT ₅₀). Translocation of systemic fungicides and insecticides. Detection of insecticides on seed. Analysis of significance of difference of insecticide effects. Effects of biofungicides and bioinsecticides on tests organisms.			
Required Reading: 1. Anonimus: EPPO Standards. Vol. 1-4, Paris, 2004. 2. Copping, L.G.: The Manual of Biocontrol Agents, BCPC, UK, 2009. 3. Vuković, S., Šunjka, D.: Biopesticidi, Poljoprivredni fakultet, Novi Sad, 2022. 4. Indić, D., Vuković, S.: Praktikum iz Fitofarmacije (fungicidi, zoocidi), Poljoprivredni fakultet, Novi Sad, 2012. 5. Kolektiv autora: Pesticidi u poljoprivredi i šumarstvu u Srbiji 2024, Društvo za zaštitu bilja Srbije, Beograd, 2024.			
Weekly Contact Hours: 2+2	Lectures: 30	Practical work: 30	
Teaching Methods: Lectures, Practical classes, Research work			
Knowledge Assessment (maximum of 100 points):			
Pre-exam obligations	points	Final exam	points
Active class participation	10	written exam	
Practical work		oral exam	50
Preliminary exam(s)		
Seminar(s)	40		
The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.			

