

Study Programme: PHYTOMEDICINE			
Course Unit Title: ZOOCIDES, BIOCIDES AND COMMUNAL HYGIENE			
Course Unit Code:19.FT2009			
Name of Lecturer(s): Ass. Prof. Dušan Marinković, PhD, Prof. Vojislava Bursić, PhD			
Type and Level of Studies: UNDERGRADUATE ACADEMIC STUDIES			
Course Status (compulsory/elective): compulsory			
Semester (winter/summer):summer			
Language of instruction:english, serbia			
Mode of course unit delivery (face-to-face/distance learning):face to face			
Number of ECTS Allocated:4			
Prerequisites:-			
Course Aims: The aim of the course is to acquire basic knowledge about zoocides, biocides and communal hygiene, disinfection, disinsection and pest control and biocides: biological effects, effectiveness, phytotoxicity, risk assessment and their application strategy.			
Learning Outcomes: Recognition and accomplishment of the main characteristics of the different groups of zoocides and biocides. Identification the advantages and disadvantages of the use of each group of zoocides and biocides based on understanding of their efficacy against pests as well as their good and weak toxicological and ecotoxicological properties. Impact of zoocides on non-target biota and food chain within agro-eco systems. Implementation of selection/choice of compounds for sound and environmentally acceptable control. Better knowledge of the measures and procedures that are carried out within the framework of DDD activities.			
Syllabus: Theory inorganic compounds, chlorinated hydrocarbons and persistence. Mode of action of insecticides: dinitrophenoles, carbamates, organophosphates, Pyrethrum and Pyrethroids, Insect Growth Regulators. Neonicotinoides-mode of action. Sterile insect techniques. Bioinsecticides. Prerequisites for effective insect control, mode of action. Causes and ways of resistance development. Acaricides, relationship: predators and mites. Nematocides. Molluscicides. Rodenticides. Avicides. Attractants and repellents. Hygiene analysis of socio-economic units (settlements), urbanization and the consequences of urbanization, disinfection, disinsection and deratization (DDD), assessment of the threat of areas for the application of DDD measures, development of plans and programs for performing DDD tasks <i>Practice</i> Biological evaluation of биоцидес (determination of compound LD50 in the powder formulation, LD50 for digestive intake (feeding tests). Verification of LT50 and LD50 after topical insecticide application. The diversity of toxins responsible for the action of biocides, testing the speed of action of biocides depending on the chemical group and the method of introduction of the preparation. Structure of biological agents and assurance of toxicity to target organisms, domain and functionality.			
Required Reading: Anna Wypych and George Wypych: Databook of Biocides, ChemTec Publishing, Ontario, Canada ISBN: 9781927885048, 2015			
Weekly Contact Hours:	Lectures:3	Practical work:2	
Teaching Methods: Lectures, Practice/ Practical classes, Demonstrations, Consultations			
Knowledge Assessment (maximum of 100 points):			
Pre-exam obligations	points	Final exam	points
Active class participation	5	written exam	
Practical work	5	oral exam	50
Preliminary exam(s)	20	
Seminar(s)	20		
The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.			

