Study program: Agricultural Sciences

Type and level of study: Doctoral academic studies

Course Title: Biological control in plant production

Teacher(s): associate research, Slobodan B. Krnjajić, PhD

Status: Elective 2, III semester

ECTS: 11

Prerequisite: None

The goal of the course: The aim is to provide the students an adequate theoretical and practical knowledge in the field of application of biological methods of pest control in organic crop production. In this way, there shall be students who will be able to directly apply the different methods of biological control in organic crop production in crop, fruit and vegetable production.

The outcome of the subject: Participants will acquire a functional, applicable knowledge in the field of biological pest control in crop production, which will be able to apply both conventional as well as in organic farming.

Syllabus:

Theoretical study - Basic principles of classical, integrated and organic farming. Benefits and differences of organic farming. Basics of plant protection in organic production. The application of preventive measures in plant protection. The use of alternative methods of plant protection. Possibilities of application of natural products based on extracts and essential oils of plants.

Practical classes - Application of the disease on the basis of insect viruses, bacteria and fungi in plant protection. The use of predators and parasitoids in crop protection

Literature:

1. https://www.apsnet.org/edcenter/advanced/topics/Pages/BiologicalControl.aspx
2. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2610108/
3. https://www.wur.nl/en/Research-Results/Research-Institutes/plant-research/Biointeractions-Plant-Health/Diseases-and-pests-in-crops/Biological-control.htm
4. https://ag.umass.edu/vegetable/fact-sheets/biological-control-of-plant-diseases
5. Polina Pierce Organic Garden (original title: Encyclopediaof Organic Gardening by Polina Pirs) Publisher Imhotep, Banja Luka.

Number of lectures:				Other Classes
Lectures: 10	Practices: 3	Other forms of teaching:	Student research work: 7	

Teaching methods: Working in study groups, research design, implementation and presentation of research results and scientific publics. Development of case studies.

Score for grading (maximal 100 points)

Pre-commitments	**Poens**	**The final exam**	Poens
Activity during lectures	10	Written exam	20
Practical classes	40	Oral examination	20
Colloquia			
Seminars	10		
Total	60		40