

Discipline	<i>TRAINING PRACTICE – PLANT PROTECTION</i> code: 43 summer semester		
Specialty	AGRONOMY		
ECTS credits: 1	Form of assessment: Accepted		
Lecturer	Assoc. prof. Nadya Daskalova PhD Room 124 Phone: +359895317358 E-mail: nadia.daskalova@tu-varna.bg		
Department	PLANT PRODUCTION		
Faculty	<i>FACULTY OF MECHANICAL ENGINEERING AND TECHNOLOGIES</i>		
<p>Annotation:</p> <p>The designed studying plan which is the Bachelor's degree program, Training Practice – Plant Protection, is essential for the future agronomists to become very good specialists. The main focus in the teaching practice is application and linking theory to a practical environment. The practice will provide to the students to acquire the types of methods for investigation and assessment of pest infestation, to be able to apply them in a real environment and to draw conclusions about whether or not they need chemical control. The correct identification of diseases by symptoms, the diagnosis of a species of enemy by imaginary, larval, caviar or egg stage and by type of damage, as well as the morphological determination of the weed species and the phenology in which they are found are essential for the course and implementation of the system of measures to combat them. By touching live illnesses, weeds and enemies, students will remember and learn them permanently. This will help future specialists - agronomists to manipulate freely with the set of major pests on individual cultures and quickly and adequately make decisions to fight them.</p> <p>During the training practice, it will emphasis on all possible ways of fighting, with a special focus on chemical protection. The chemical treatment rules include a set of measures for the protection of cultivated plants, the useful fauna and flora, the protection of human health, soil, air and water.</p> <p>Another focus in practical training will be the alternative stuff of pest control (useful insect bio-agents, biologically-based preparations and authorized plant protection products in organic and integrated agriculture). Practical training also includes visits to agricultural farms and companies to monitor and participate students in a number of plant protection activities.</p>			
CONTENTS:			
	Training Area	Hours lectures	Hours seminar exercises
	Winter spraying with plant protection preparations.		4
	A key to determining the nature of plant diseases based on their signs.		5
	Types of enemies, types of damage and work with determination tables (Harizanov and Harizanova, 1998 - Part one and two) for enemies of agricultural crops.		5
	Ways of surveying enemies in crops of field, technical and vegetable crops, of fruit, vine plantations.		10
	Methods for assessment of weeding in the main crops in the UOP. Number of reports for crop types.		4

<p>(specified at the beginning of the UP on RZ, but the defense is in the last hours of the discipline): photographic material of certain weed species (assessed according to VVSN), diseases (by symptoms - macroscopic diagnosis) and enemies (by key and definition tables) . The photo material is outside the boundaries of the UOP, if possible in agricultural fields, taking into account the phenology of the crops according to the VVSN (part of the VVSN scales according to Daskalova, 2018 - Manual for exercises in Plant breeding part 2, Technical and essential oil crops). Collecting and storing an entomological collection (task with continuation). Solving practical case studies in the application of herbicides.</p>		2
TOTAL: 30 h		30