

# Online&onsite course and training school in: *Plant Breeding and Crop Improvement*

First week online lectures 19.05.2026.-21.05.2026.

Second week onsite lectures and field visits 26.05.2026.-28.05.2026.

This course, taught by experienced plant breeders and molecular biologist, is designed to address the shortage of trained professionals in the field. We go beyond theory by putting you in a classroom and on the field with the industry's best, making our curriculum unmatched by purely academic programs. It has been designed and supported by:

- [Reproductive Enhancement of CROP resilience to extreme climate - Recrop COST action 22157](#)
- [University of Novi Sad, Faculty of Agriculture](#)
- [KWS Serbia](#)



**Course goal:** This course helps current and future plant breeding professionals develop the skills they need to become independent breeders or more valuable members of a larger breeding team. Program participant will: expand knowledge, learn new skills, develop a strategy and create a network. We will focus mainly of corn and wheat, but other crops will be covered also.

**Who should attend?** This course is for newcomers and people already working in plant breeding who want to become independent breeders and for the ones who lack the academic background in genetics theory and practice. It's also a great fit for experienced breeders who want to refresh their skills or expand their knowledge.

**Application Process:** To provide a personalized learning environment, the program is limited to 20 participant's total. Applicants should complete the online form in order to be considered for enrollment, which will be available at the [Google questionnaire](#) from February 1<sup>st</sup> up to 15<sup>th</sup> of March. Applicants' background and experience will be reviewed to ensure they meet the minimal

requirements before acceptance. Among applicants meeting the program requirements, acceptance will be on a first-come, first-served basis. Through Recrop COST action we will secure 6-7 reimbursements for European or NNC based students/researchers at all levels.

**Tuition:** For participants who are not supported through COST action 22157 Recrop, the cost of participating is 2,000 Euros which includes all course materials and fees, along with lunches, breaks and transportation during the second week. The tours are designed to balance the classroom instruction with seed and agricultural industry experiences. Travel to Serbia, accommodations and other meals are not included.

### **Program:**

#### First week:

<b>Time</b>	<b>Tuesday</b>	<b>Wednesday</b>	<b>Thursday.</b>
<b>10.00-11.30</b>	Plant Thermotolerance at the Physiological Level: Scaling Knowledge from Models to Crops	Molecular Mechanisms of Heat Stress Responses: Genetic Strategies for Survival and Recovery	Experimental and Omics-Based Approaches to Decipher Heat Stress Responses and Thermotolerance
<b>13.00-14.30</b>	Heritability, Recurrent selection.	What are estimated breeding values?	Genotype x environment interaction and stability analysis.
<b>16.00-17.30</b>	The Art and the Science of Plant Breeding.	Trait and marker selection.	Linkage Disequilibrium; QTLs; digital twins

\*All hours are by CET

#### Second week:

During second week field trips will be organized every day from 9AM up to 5PM. Lunch shall be included within the visits. During the day participant will have the lecturers on their disposal all the time. The participants will visit the following experiments/trials:

- Smederevska Palanka, [Institute for Vegetables](#) + [Grow Rasad](#) Company (Irig). Visit will cover transportation, sightseeing of indoor and outdoor experiments of vegetables. Discussions with breeders and seed consultants.
- [PSS](#) Sombor + [ClimaPannonia](#) experiments. In Sombor the participant will have the chance to visit DUS tests for vegetables + corn trials isolations and seed productions. Afterwards, organic crop production of cereals and legumes + agroforestry trials with poplar and berries, under one of the largest EU projects in this part of Europe, will be visited.

- PSS Pančevo/Institute Tamiš VCU experiments + KWS Srbija Breeding Station where all of the equipment used in corn breeding process will be explained, seed processing, digital schemes, tools, drons etc.

In case of rain, we will prepare classroom/laboratory courses.

### Primary Instructors:



Professor Velimir Mladenov is a dedicated professor of Plant Breeding at UNSFA. He excels at integrating his constant research and industry collaborations directly into his teaching, offering students a dynamic and highly relevant learning experience.



Dr. Bojan Drašković is a corn breeder for KWS Serbia, where he oversees breeding operations for both Serbia and Turkey. His dedication to his work consistently pushes the boundaries of corn breeding.



Dr. Sotirios Fragkostefanakis is a Group Leader, Plant Molecular and Cell Biology, at Goethe University Frankfurt, Germany. Also, he is a Recrop Action Chair. He is devoted to identify and characterize the molecular mechanisms that allow the survival of plants under abiotic stresses.

### Contact:

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Payment instructions for non Recrop members (\*Purpose of payment Training School Plant Breeding; 2000e):

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FIELD 50K: ORDERING CUSTOMER

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