



"This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 952396".



УНИВЕРЗИТЕТ У БАЊОЈ ЛУЦИ  
UNIVERSITY OF BANJA LUKA

## Promoting SMART agricultural WATER management in Bosnia and Herzegovina - SMARTWATER

# SMART WATER

PROMOTING SMART AGRICULTURAL WATER MANAGEMENT  
IN BOSNIA AND HERZEGOVINA

## The first Advanced Training Course - Programme *Advanced remote sensing technologies and tools for crop water requirements estimates and irrigation scheduling*

Lisbon, Portugal

Instituto Superior de Agronomia | Universidade de Lisboa  
(ISA | Ulisboa, *Salão Nobre*/Noble Hall)

LEAF – Linking Landscape, Environment, Agriculture and Food  
27.09.2021 - 01.10.2021

### Participants:

- Early-stage researchers and scientists from **UNI-BL** (Univ. Banja Luka) and **UNSA** (Univ. Sarajevo) (**online**)
- ISA students (presential, limited to room capacity, registration before 22.09.2021: [https://docs.google.com/forms/d/e/1FAIpQLScHQIUxyMUUkieswFaDXjTy1NqL2JLGbnbXLhpT3nxpihcWIw/viewform?usp=sf\\_link](https://docs.google.com/forms/d/e/1FAIpQLScHQIUxyMUUkieswFaDXjTy1NqL2JLGbnbXLhpT3nxpihcWIw/viewform?usp=sf_link))



Grant Agreement number: 952396

SMARTWATER — H2020-WIDESPREAD-2018-2020 / H2020- WIDESPREAD-2020-5



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## Promoting SMART agricultural WATER management in Bosnia and Herzegovina - SMARTWATER

The first Advanced Training Course  
Lisbon, Portugal  
27.09.2021 - 01.10.2021

### *Advanced remote sensing technologies and tools for crop water requirements estimates and irrigation scheduling* **PROGRAMME**

Monday, September 27, 2021

🕒	TOPIC	WITH
10:00 - 10:30	Registration for presential participants - Noble Hall -	
10:30 - 11:00	WELCOME SPEECH	<b>António Guerreiro de Brito</b> President of ISA (University of Lisbon)  <b>Mihajlo Marković</b> Project Coordinator (University of Banja Luka – BH)
11:00 - 11:30	Project implementation - status and perspectives -	<b>Mihajlo Marković</b> UNI-BL
11:30 - 12:00	ISA participation in SMARTWATER	<b>Teresa A. Paço</b> ISA-ULisboa
	Short break	
12:15 - 12:45	Joint experimental studies - status and perspectives -	<b>Nataša Čereković</b> UNI-BL
	Lunch	
14:30 - 15:00	Advanced Training Course Programme	<b>Teresa A. Paço</b> ISA-ULisboa

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## Tuesday, September 28, 2021

🕒	TOPIC	WITH
09:30 - 10:30	Crop water requirements: from direct measurement to tabled values	<b>Teresa A. Paço</b> ISA-ULisboa
	Discussion	
10:45 - 11:45	Modelling crop water requirements with the FAO56 approach *	<b>Paula Paredes</b> ISA-ULisboa
	Discussion	
	Lunch	
14:30 - 16:00	Modelling crop water requirements with the FAO56 approach - Hands on activity *	<b>Paula Paredes</b> ISA-ULisboa
	Discussion and wrap up	

\*this activity requires the use of a computer

## Wednesday, September 29, 2021

🕒	TOPIC	WITH
09:30 - 10:30	Remote sensing techniques and irrigation – state of the art	<b>Isabel Pôças</b> ForestWISE CoLAB
	Discussion	
10:45 - 11:45	Using satellite data to estimate evapotranspiration	<b>Isabel Pôças</b> ForestWISE CoLAB
	Discussion	
	Lunch	
14:30 – 15:30	Assessment of crop sustainability by modelling	<b>M<sup>a</sup> Rosário Cameira</b> ISA-ULisboa
	Discussion	
15:30 – 16:30	Irrigation requirements modeling in a climate change context	<b>João Rolim</b> ISA-ULisboa
	Discussion and wrap up	



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## Thursday, September 30, 2021

🕒	TOPIC	WITH
09:30 - 11:00	Sentinel 2 for estimating basal crop coefficients – hands on activity*	<b>Isabel Pôças</b> ForestWISE CoLAB
	Discussion	
11:15 – 12:15	Determination of plant stomata density for different levels of water stress - Hands on activity	<b>Mariana Mota</b> ISA-ULisboa
	Discussion	
	Lunch	
14:30 – 15:30	Use of models and new technologies to support integrated water management in agriculture.	<b>Mladen Todorović</b> CIHEAM-IAMB
	Discussion and wrap up	

\*this activity requires the use of a computer with the software QGIS 3.16 (open access) installed  
QGIS - version 3.16 (64 bit):

[https://qgis.org/downloads/QGIS-OSGeo4W-3.16.10-1-Setup-x86\\_64.exe](https://qgis.org/downloads/QGIS-OSGeo4W-3.16.10-1-Setup-x86_64.exe)

QGIS - version 3.16 (32 bit):

<https://qgis.org/downloads/QGIS-OSGeo4W-3.16.10-1-Setup-x86.exe>

## Friday, October 1, 2021

🕒	TOPIC	WITH
09:30 - 10:30	Research proposal development	(to confirm)
	Discussion	
10:45 - 11:45	Management of national and EU projects	(to confirm)
	Discussion	
	Lunch	
14:30 – 15:30	Writing of peer reviewed scientific publications	<b>David Fangueiro</b> ISA-ULisboa
	Discussion	
	Conclusions and final remarks	

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