



SHARInG-MeD

SOIL HEALTH AND AGRICULTURE RESILIENCE THROUGH AN INTEGRATED GEOGRAPHICAL INFORMATION SYSTEM OF MEDITERRANEAN DRYLANDS

Summer School

Date: 1st to 3rd September 2025

Venue: Çukurova University, Mithat Özsan Conference Hall, Çukurova University Balcalı, 01790 Adana, Turkey (https://maps.app.goo.gl/kzr3E785cJRac5yPA)

Link to enroll in the Open ceremony (1st September), Field School (2nd September), and School Day (3rd September): https://forms.gle/HC9cAh8oide5GZVL8











PROGRAM

Second year meeting of the SHARInG-MeD project. CU, Department of Soil Science and Plant Nutrition. Adana/Türkiye. From 01st to 03th September 2025.

First Day, 01 September 2025

Link to enroll in the Open ceremony (1st September), Field School (2nd September), and School Day (3rd September):

https://forms.gle/HC9cAh8oide5GZVL8

Open ceremony - Synergies with other Horizon Europe/PRIMA projects and promoting the Soil Mission: Prof. Sergio Saia and Prof. İbrahim Orta ş							
09:00	09:30	Welcome and Greetings, Prof. Sergio Saia and Prof. İbrahim Ortaş					
09:30	09:50	Welcome, Prof. İbrahim Ortaş	Principal investigator of the PRIMA project SHARInG-MeD at CU				
09:50	10.00	Prof. Selim EKER	Head of the Department of Soil Science and Plant Nutrition				
10:00	10:10	Prof. Nazan KOLUMAN	Dean of the Faculty of Agriculture				
10:10	10:20	Prof. Hamit Emrah BERİŞ	Rector of Çukurova University				
10:20	11:00	Prof. Süha Berberoğlu Ç.U. Dept. of Landscape Architecture	The PRIMA project "Soil health monitoring and information systems for sustainable soil management in the Mediterranean region (SOILS4MED)".				
11:00	11:30	Prof. Sergio SAIA (Coordination of SHARInG-MeD, University of Pisa, IT)	SHARInG- MeD (PRIMA 2022) and the ecosystem of Research and Innovation Action in the Soil Health				
11:30	12:00	Prof. Ebru Kafkas (Ç.Ü. Dept. of Horticulture Science)	Sustainable Agricultural Technologies and Global Climate Change in the Çukurova Region				
12:00	12:30	Prof.Maria Rosa Mosquera Losada coordinator of SUS-SOIL, University of Santiago De Compostela, ES)	The EU Mission Soil and the living lab tool to promote the environmental, economic, and social sustainability in both the EU and other countries in the Mediterranean: the SUS-SOIL project				
12:30	13:00	Prof. Sergio SAIA, Prof. İbrahim Ortaş, Prof. Rim Ben Amor	General debate and collaboration among activities, with special emphasis on the Mediterranean and arid conditions				
13:00	14:30	Lunch at the University Cafeteria	https://maps.app.goo.gl/9MQJHHkAuVGX13k19				
14:30	15:30	Chairman: Sergio Saia. Discussing: Maria Rosa Mosquera Losada, Claudio Zucca, Süha Berberoğlu, Selim Kapur, İbrahim Ortaş	Common features, differences, and their efficient integrations, and collaboration among projects to deliver more robust and complete data to the stakeholders				
19:30	22:30	Dinner					











Second day, 02nd September 2025 – Field school and field visit

Link to enroll in the Open ceremony (1st September), Field School (2nd September), and School Day (3rd September):

https://forms.gle/HC9cAh8oide5GZVL8

From	То	The Project unit members' presentation to Postgraduate students Morning Field School at CU field station, open to students and researchers Link for the enrollment:		
08:30		Leaving from the Hotel to the CU University research farm		
09:15	12:00	Field Teaching on soil beneficial organisms and soil health by teachers from Türkiye, Italy, France, Spain, Morocco, Algeria, Tunisia, Croatia, and Greece	Visit long-term field experiment works OR project experiments, https://maps.app.goo.gl/D1LXrXhq4zZbF1EM9	
12:00	14:00	Lunch will be served at the University Cafeteria		
14:00	14:45	Eastern Mediterranean Forestry Research Institute	https://www.ogm.gov.tr/doguakdeniz/	
		Visiting TARSUS city	Historical places: Cleopatra's Gate, Roman Road. St. Paul's Well. Donuktaş Roman Temple	
17:00	18:00	Return to Adana		











Third Day, 03rd September 2025, Microorganisms, Nematodes, Protists, and Soil Health (Mithat Özsan Hall)

Link to enroll in the Open ceremony (1st September), Field School (2nd September) and School Day (3rd September): https://forms.gle/HC9cAh8oide5GZVL8

From	To	Teachers	Topics	
09:30	09:45	Prof. İbrahim Ortaş	Small introduction of the day and speakers	
09:45	10:15	Prof. Sergio Saia (UNIPI, IT)	Soil Health, definitions, management, and policy use	
10:15	10:45	Tatiana Robledo, Maria Lopez, (UGR, ES)	Soil microbes from the perspective of soil health and agriculture	
11:15	11:45	Prof. İbrahim Ortaş (CU, Türkiye)	Role of beneficial microbes in carbon stabilisation and soil health, with special emphasis on cropland	
11:45	12:15	El Hassan Mayad (UIZ, Morocco)	Nematodes and soil health, with special emphasis on cropland	
12:30	13:30	Lunch		
13:30	14:30	Prof. Tiphaine Chevalier (IRD, France)	Soil Inorganic Carbon and Soil Health	
14:30	15:00	Dr. Muhammad Mohsin Abrar	Organic carbon stabilization mechanisms across the soil profile under mineral and manure fertilization.	
15:00	15:30	Prof. Igor Bogunovich (FAZ, Croatia)	Biochar and Soil Health in Cropland	
15:30	16:00	Prof. Hichen Chenaker (ENSF, Algeria)	Water and soil health	
16:00	16:30	Prof. Rim Ben Amor and Prof. Imene Dridi (UTM, Tunisia)	Geochemistry, geology, and soil health in agriculture	
16: 30	17:00	Coffee break		
17:00	17:30	Prof. Rim Ben Amor and Prof. Imene Dridi (UTM, Tunisia)	Geochemistry, geology, and soil health in agriculture	
17:00	17:30	Dr. Ioannis Zafeiriou (AUA, Greece)	Hyperspectral imaging and Machine Learning for soil health measurements	
17:30	18:00	Dr. Elisa Bruni (LG-ENS, France)	Process-Based Models for Soil Health	
18:00	18:30	Prof. Rattan Lal (Distinguished University Professor of Soil Science, Director, CFAES Rattan Lal Center for Carbon Management and Sequestration. The Ohio State University. USA)	Sustainable Agriculture and Soil Management for Addressing Global Issues	











SHARInG-MeD SUMMER SCHOOL

Summer School on Soil Health and Agricultural Resilience Through Integrated Geographic Information Systems on Restoring Soil Health in Mediterranean Drylands Due to Climate Change and Soil Degradation

The FAO and the EU provide a strategic framework for efforts to protect and restore soil health in the Mediterranean Region. However, due to unsustainable land management, overgrazing, deforestation, and climate change, 60-70% of soils in the Mediterranean region are degraded, and the situation is projected to worsen. The depletion of soil organic carbon poses a direct threat to soil health and food security. In addition to the extreme climate conditions prevailing in North Africa and Southern Europe, unsustainable land and water management, overgrazing, deforestation, and forest fires are transforming large parts of these areas into deserts. Degraded and salinized soils have a significant impact on food security.

In this context, SHARInG-MeD's view is that the potential for soil organic carbon has decreased, rather than increased, and low organic carbon is directly related to the threat to soil health. SHARInG-MeD (Soil Health and Agriculture Resilience through an Integrated Geographical Information Systems of Mediterranean Drylands). The general objective of the project is *Soil Health and Agricultural Resilience in Mediterranean Drylands through Integrated Geographic Information Systems*. To increase agricultural sustainability by informing policy makers, scientists, end-users of soils, etc. about the use of soil-agricultural indicators and their relationships in the Mediterranean region.

The SHARInG-MeD project has six main defined objectives.

Objective 1: To update the basic soil maps by performing basic soil analyses of soil samples covering unsampled areas.

Purpose 2 To examine the role of land use and land use change in soil properties.

Objective 3: To fill gaps in the relationships between soil properties (e.g., salinity, SOC, pH), crop yields, and environmental and economic performance of crop production by analysing the response of soil properties to crop management, productivity, economic, and environmental impacts.

Purpose 4 To assess the drivers of soil degradation and to determine future measures.

Purpose 5: Integrating science and communication experts in line with the purpose of the research, conveying the project's objectives to the relevant parties, and receiving feedback from them to provide new planning.

Goal 6: To promote sustainable agricultural and soil management practices to improve soil functions.

The SHARInG-MeD project will investigate the impact of land use on soil quality in Mediterranean agricultural areas through the application of agroecological approaches. The project aims to model soil properties at a large scale; to analyse changes in soil properties down to the smallest detail; to model the relationships between land or crop (especially soil) management practices and the environmental and economic performance of agricultural systems or crops; to harmonize soil data across different public databases; and to promote soil improvement practices (conservation agriculture, organic material applications, and the use of beneficial microorganisms) in the Mediterranean arid regions, particularly in West Asia and North Africa (WANA).

SHARInG-MeD will identify the physical, chemical, and biological properties of soils taken from five different land uses in the region to improve deteriorating soil health. Data will be mapped to raise soil awareness with the participation of farmers, producers, the public, and university scientists for healthy, arable soil management in the future.

In this context, SHARInG-MeD will be holding a summer school and meeting at Cukurova University from September 1-3. The goal of the school day is to provide a











comprehensive educational experience, focusing on the latest advancements and methodologies in soil carbon sequestration and agricultural resilience. In summer school, the students and subject-related experts will be providing practical and theoretical training on improving soil health, sustainable agriculture, food security, and the importance of climate change. The school day is organized by the Carbon Group of the SHARInG-MeD project and supported by the Faculty of Agriculture Sciences, Department of Soil Science and Plant Nutrition. Graduate research students interested in the subject are welcome to participate.

FOR REGISTRATION,

Communicated with Prof. Dr. İbrahim Ortaş
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LOGISTIC SUGGESTIONS

Organizing Committee

İbrahim Ortaş (ÇU); Mehmet Işık (ÇU); Veysi Akşahin (CU); Sadiye Kibritçi (CU); Feyzullah Öztürk (ÇU); Mohsin Abrar, Sergio Saia (UNIPI). For more information, +90 5337692415. Please send an email to iortas@cu.edu.tr.











Travel suggestions

- Çukurova International Airport



From Hotel to Çukurova University, and from the University to the Field directions













From the Hotel to Çukurova University, and from the University to the Field directions

Hotel Information

Hotel	Link	Direction	GPS (Google map Link)	From the hotel to the University	Distance from the University Hall
Adana Şirin Park Hotel	https://www.sirin park.com/Tr/Def ault.aspx	Kayalıbağ, Turhan Cemal Beriker Blv. no:17, 01120 Seyhan/Adana	https://www.sirinpark.co m/Tr/Default.aspxhttps:// maps.app.goo.gl/YYMjD fy5rUMERnpX6	NAZ1fwHxQvMC2oE	
Hotel Seyhan	https://www.otels eyhan.com.tr/tr/	Turhan Cemal Beriker Blv 20/A,Reşatbey, 01120 Seyhan/Adana	https://maps.app.goo. gl/JZ15mAAkvf6W Hz9r6	https://maps.app.go o.gl/NAZ1fwHxQv MC2oEQ6	9 km

There is no security problem. Hotels are in the city centre. In the city centre, 24-hour food can be found. There are two dams near the hotel along the Seyhan River and a walking area. From the hotel to the university and return, transportation will be organised by us.

TARSUS (visiting a historical city)

https://en.wikipedia.org/wiki/Tarsus, Mersin. 35 km to Adana





