

5th EDITION OF INTERNATIONAL CONFERENCE
**PLANT PRODUCTIVITY AND
FOOD SAFETY:**

MICROBIOLOGY, SOIL SCIENCE, FOOD QUALITY AND AGRICULTURAL GENETICS

23-24 June 2025

THE EVENT HELD IN
CONJUNCTION WITH THE
ANNUAL MEETING OF
SUSTAIN COST ACTION 22144

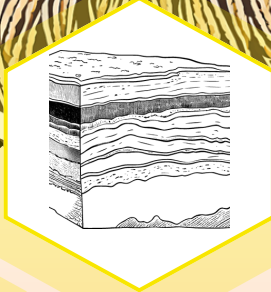
SESSION I:
PLANT-MICROORGANISMS
INTERACTIONS IN AGRICULTURE
AND ECOSYSTEM
MANAGEMENT



SESSION II:
PLANT METABOLISM AND
SIGNALLING



SESSION III:
SOIL THREATS AND SECURITY



SESSION IV:
THE GLOBAL PROBLEM
OF SALINITY -
AN INTERDISCIPLINARY APPROACH

ON SITE ONLY
Nicolaus Copernicus University in Toruń
Faculty of Biological and Veterinary Sciences
Faculty of Earth Sciences and Spatial Management
Lwowska 1 Street, 87-100 Toruń

7:15 - 12:00	Registration
8:15 - 8:30	Opening the Conference
8:30 - 9:00	Keynote Lecturer's speech (<i>will be announced</i>)

* - OBSIDIAN Conference Participants can select and take part in parallel events

SESSION I * Plant-Microorganisms Interactions in Agriculture and Ecosystem Management (Session Chairs: <i>will be announced</i>)		WORK GROUP 3 * (COST Action 22144) Total value of saline ecosystems and landscapes (Session Chairs: <i>will be announced</i>) (9:00 - 12:00)
9:00 - 9:25	Keynote speaker	During this interactive session, we will explore valuation techniques for salt-affected lands with practical examples in selected countries. We will also conduct meta-analysis exercise showcasing economic potential of salt-affected land.
9:25 - 9:30	Q&A Panel	
SHORT PRESENTATION PANEL		
9:30 - 9:45	Lecture 1	
9:45 - 10:00	Lecture 2	
10:00 - 10:15	Lecture 3	
10:15 - 10:30	Lecture 4	
10:30 - 10:45	Lecture 5	
10:45 - 11:00	Discussion	
11:00 - 12:00	Poster Session	
12:00 - 12:10	Group Photo	
12:10 - 13:00	Coffee Break	

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SCHEDULE OBSIDIAN 23th JUNE 2025

<p>SESSION II *</p> <p>Plant Metabolism and Signalling</p> <p>(Session Chairs: <i>will be announced</i>)</p>		<p>WORK GROUP 4 & 5 *</p> <p>(COST Action 22144)</p> <p>Knowledge sharing and stakeholders' engagement & Policy framework for the salinisation management</p> <p>(Session Chairs: <i>will be announced</i>)</p> <p>(13:00 - 16:00)</p>
13:00 - 13:25	Keynote speaker	<p>During this interactive session, we will address topics related to both stakeholder empowerment and governance. This group will discuss effective ways to engage various stakeholders via workshops, sustainable saline agriculture value chain to support national and international agricultural policies and future research agenda at local and international scale.</p>
13:25 - 13:30	Q&A Panel	
SHORT PRESENTATION PANEL		
13:30 - 13:45	Lecture 1	
13:45 - 14:00	Lecture 2	
14:00 - 14:15	Lecture 3	
14:15 - 14:30	Lecture 4	
14:30 - 14:45	Lecture 5	
14:45 - 15:00	Discussion	
15:00 - 16:00	Poster Session	
18:00 - 19:30	Guided Walk Tour of Toruń	
19:30 -	Gala Dinner	

7:30 - 12:00

Registration

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<p>SESSION III *</p> <p>Soil Threats and Security</p> <p>(Session Chairs: <i>will be announced</i>)</p>		<p>WORK GROUP 2 *</p> <p>(COST Action 22144)</p> <p>Plant responses to salinity at the shoot and the root level</p> <p>(Session Chairs: <i>will be announced</i>)</p> <p>(8:30 - 11:00)</p>
8:30 - 8:55	Keynote speaker	<p>During this interactive session, we will discuss future experimental work and genetic improvement programs in order to characterise and quantify root-microbial-soil interactions in saline soils, and their potential in terms of the optimal soil and water management of these lands.</p>
8:55 - 9:00	Q&A Panel	
SHORT PRESENTATION PANEL		
9:00 - 9:15	Lecture 1	
9:15 - 9:30	Lecture 2	
9:30 - 9:45	Lecture 3	
9:45 - 10:00	Lecture 4	
10:00 - 10:15	Lecture 5	
10:15 - 10:30	Discussion	
10:30 - 11:30	Poster Session	
11:30 - 12:30	Coffee Break	

SCHEDULE OBSIDIAN 24th JUNE 2025

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SCHEDULE OBSIDIAN 24th JUNE 2025

<p>SESSION IV *</p> <p>The Global Problem of Salinity - An Interdisciplinary Approach</p> <p>(Session Chairs: <i>will be announced</i>)</p>		<p>WORK GROUP 1 *</p> <p>(COST Action 22144)</p> <p>Soil and water salinity: physical and biochemical characteristics at different scales</p> <p>(Session Chairs: <i>will be announced</i>)</p> <p>(12:30 - 15:30)</p>
12:30 - 12:55	Keynote speaker	<p>During this interactive session, we will discuss the most promising technologies to monitor soil and water salinity and how they can be featured on open-access platforms. The group will also formulate preliminary guidelines on soil mapping to capture heterogeneity, sustainable agricultural practices and identifying gaps and new innovations/technologies.</p>
12:55 - 13:00	Q&A Panel	
SHORT PRESENTATION PANEL		
13:00 - 13:15	Lecture 1	
13:15 - 13:30	Lecture 2	
13:30 - 13:45	Lecture 3	
13:45 - 14:00	Lecture 4	
14:00 - 14:15	Lecture 5	
14:15 - 14:30	Discussion	
14:30 - 15:30	Poster Session	
15:30 - 16:00	Closing Ceremony and Awarding	
16:00 - 18:00	Management Committee Meeting (COST Action 22144)	

23 - 27 JUNE 2025

OBSIDIAN 2025 Laboratory-workshop "Plant-microbial interactions in saline areas"

Place: Department of Microbiology, Faculty of Biological and Veterinary Sciences, Nicolaus Copernicus University

Lecturers: Deja-Sikora Edyta, Furtado Bliss U., Kalwasińska Agnieszka, Thiem Dominika, Szymańska Sonia, Szydło Jagoda, Marangi Matteo

Suggested trainees: students (max. 10 participants)

Task: Isolation, characterisation of microorganisms associated with halophytes.
Effect of salinity on microbial diversity and metabolic activity.

25 JUNE 2025

OBSIDIAN 2025 Field-workshop „Plant-soil relationships in saline areas"

Place: Inowrocław, the saline area around the soda ash plant (40km from Toruń)

Lecturers: Piotr Hulisz, Agnieszka Piernik

Suggested trainees: scientists, PhD students (max. 50 participants)

Task: Identification of halophytes, field study of soil properties and assessment of the influence of local environmental conditions on plant biodiversity