

5<sup>th</sup> EDITION OF INTERNATIONAL CONFERENCE

# PLANT PRODUCTIVITY AND FOOD SAFETY:

MICROBIOLOGY, SOIL SCIENCE, FOOD QUALITY AND AGRICULTURAL GENETICS

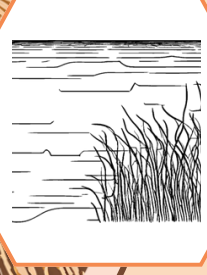
23-24 June 2025

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

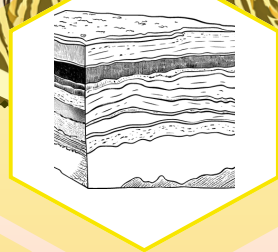
SESSION I:  
PLANT-MICROORGANISMS  
INTERACTIONS IN AGRICULTURE  
AND ECOSYSTEM  
MANAGEMENT



SESSION II:  
PLANT METABOLISM AND  
SIGNALLING



SESSION III:  
SOIL THREATS AND SECURITY



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



**Keynote Lecturer**  
Prof. David B. Collinge  
Department of Plant and  
Environmental Sciences (PLEN),  
Faculty of Science,  
University of Copenhagen, Denmark

**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

www: [https://soil-micro.umk.pl/pages/Konferencja\\_2025/](https://soil-micro.umk.pl/pages/Konferencja_2025/)

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## PLANT PRODUCTIVITY AND FOOD SAFETY:

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23-24  
June 2025

7:15 - 12:00	Registration
8:15 - 8:30	Opening the Conference
8:30 - 9:00	Keynote Lecturer's speech <b><u>PROF. DAVID B. COLLINGE</u></b> (University of Copenhagen, Denmark) Presentation Title: "Fungal endophytes for plant disease control"

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

CONFERENCE OBSIDIAN 2025		COST SUSTAIN ANNUAL MEETING
		<p>Ice-Breaker Session SESSION CHAIRS: <b><u>KATALIN SOLYMOSI</u></b> (Eötvös Loránd University (ELTE), Hungary) <b><u>/ LUÍSA CUSTÓDIO</u></b> (Centro de Ciências do Mar   CCMAR, Portugal) (7:45 - 8:15)</p>
<p><b>SESSION I *</b></p> <p><b>Plant-Microorganisms Interactions in Agriculture and Ecosystem Management</b></p> <p>Session Chairs: <b><u>IAN DODD</u></b> (Lancaster University, United Kingdom) <b><u>KATARZYNA HRYNKIEWICZ</u></b> (Nicolaus Copernicus University in Toruń, Poland)</p>		<p><b>WORK GROUP 3 *</b> (COST Action 22144)</p> <p><b>Total value of saline ecosystems and landscapes</b></p> <p>Session Chairs: <b><u>ZENEPE DAFKU</u></b> (Agricultural University of Tirana, Albania) (9:00 - 12:00)</p>
9:00 - 9:25	<b><u>IAN DODD</u></b> (Lancaster University, United Kingdom)	<p>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.</p>
9:25 - 9:30	<b>Q&amp;A Panel</b>	
<b>SHORT PRESENTATION PANEL</b>		
9:30 - 9:45	<b>Lecture 1</b>	
9:45 - 10:00	<b>Lecture 2</b>	

23th JUNE 2025

SCHEDULE OBSIDIAN

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**June 2025**

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10:00 - 10:15	<b>Lecture 3</b>	
10:15 - 10:30	<b>Lecture 4</b>	
10:30 - 10:45	<b>Lecture 5</b>	
10:45 - 11:00	<b>Discussion</b>	
11:00 - 12:00	<b>Poster Session</b>	
12:00 - 12:10	<b>Group Photo</b>	
12:10 - 13:00	<b>Coffee Break</b>	

23th JUNE 2025

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<p><b>SESSION II *</b></p> <p><b>Plant Metabolism and Signalling</b></p> <p>Session Chairs: <b><u>YONGHUA LI-BEISSON</u></b> (Environment, Bioenergy, Microalgae and Plants", CEA Cadarache, France)</p> <p><b><u>AGNIESZKA ZIENKIEWICZ</u></b> (Centre for Interdisciplinary Technologies, Nicolaus Copernicus University in Toruń, Poland)</p>		<p><b>WORK GROUP 4 &amp; 5 *</b> (COST Action 22144)</p> <p><b>Knowledge sharing and stakeholders' engagement &amp; Policy framework for the salinisation management</b></p> <p>Session Chairs: <b><u>HENRIK PER ARONSSON</u></b> (University of Gothenburg, Sweden)</p> <p><b><u>VÍTOR JOÃO PEREIRA DOMINGUES MARTINHO</u></b> (Polytechnic Institute of Viseu, Portugal)</p> <p><b>(13:00 – 16:00)</b></p>
13:00 - 13:25	<b><u>YONGHUA LI-BEISSON</u></b> (CEA Cadarache, France)	<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	<b>Q&amp;A Panel</b>	
<b>SHORT PRESENTATION PANEL</b>		
13:30 - 13:45	<b>Lecture 1</b>	
13:45 - 14:00	<b>Lecture 2</b>	
14:00 - 14:15	<b>Lecture 3</b>	
14:15 - 14:30	<b>Lecture 4</b>	
14:30 - 14:45	<b>Lecture 5</b>	
14:45 - 15:00	<b>Discussion</b>	
15:00 - 16:00	<b>Poster Session</b>	

Honorary patronage and co-organisers



Mayor of Toruń  
Paweł Gulewski



**SUSTAIN**  
Sustainable use of salt-affected lands



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**June 2025**

18:00 - 19:30	<b>Guided Walk Tour of Toruń</b>
19:30 -	<b>Gala Dinner</b>

**SCHEDULE OBSIDIAN** 23th JUNE 2025

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June 2025

7:30 - 12:00	Registration
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SCHEDULE OBSIDIAN 24th JUNE 2025

<p><b>SESSION III *</b></p> <p><b>Soil Threats and Security</b></p> <p>Session Chairs: <b><u>PIOTR HULISZ</u></b> (Nicolaus Copernicus University in Toruń, Poland)</p> <p><b><u>MARCIN ŚWITONIAK</u></b> (Nicolaus Copernicus University in Toruń, Poland)</p>		<p><b>WORK GROUP 2 *</b> (COST Action 22144)</p> <p><b>Plant responses to salinity at the shoot and the root level</b></p> <p>Session Chairs: <b><u>IAN DODD</u></b> (Lancaster University, United Kingdom)</p> <p><b>(8:30 - 11:30)</b></p>
8:30 - 8:55	<b><u>ÅSGEIR R. ALMÅS</u></b> (Norwegian University of Life Sciences)	<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	<b>Q&amp;A Panel</b>	
<b>SHORT PRESENTATION PANEL</b>		
9:00 - 9:15	<b>Lecture 1</b>	
9:15 - 9:30	<b>Lecture 2</b>	
9:30 - 9:45	<b>Lecture 3</b>	
9:45 - 10:00	<b>Lecture 4</b>	
10:00 - 10:15	<b>Lecture 5</b>	
10:15 - 10:30	<b>Discussion</b>	
10:30 - 11:30	<b>Poster Session</b>	
11:30 - 12:30	<b>Coffee Break</b>	

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SCHEDULE OBSIDIAN 24th JUNE 2025

<p><b>SESSION IV *</b></p> <p><b>The Global Problem of Salinity - An Interdisciplinary Approach</b></p> <p>Session Chairs: <b><u>KATE NEGACZ</u></b> (Vrije Universiteit Amsterdam, Netherlands)</p> <p><b><u>KATARZYNA HRYNKIEWICZ</u></b> (Nicolaus Copernicus University in Toruń, Poland)</p>		<p><b>WORK GROUP 1 *</b> (COST Action 22144)</p> <p><b>Soil and water salinity: physical and biochemical characteristics at different scales</b></p> <p>Session Chairs: <b><u>MICHAEL ORFANOUDAKIS</u></b> (Democritus University of Thrace, Greece)</p> <p><b>(12:30 - 15:30)</b></p>
12:30 - 12:55	<b>Kate Negacz</b> (Vrije Universiteit Amsterdam, Netherlands)	<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	<b>Q&amp;A Panel</b>	
<b>SHORT PRESENTATION PANEL</b>		
13:00 - 13:15	<b>Lecture 1</b>	
13:15 - 13:30	<b>Lecture 2</b>	
13:30 - 13:45	<b>Lecture 3</b>	
13:45 - 14:00	<b>Lecture 4</b>	
14:00 - 14:15	<b>Lecture 5</b>	
14:15 - 14:30	<b>Discussion</b>	
14:30 - 15:30	<b>Poster Session</b>	
15:30 - 16:00	<b>Closing Ceremony and Awarding</b>	
16:00 - 18:00	<b>Management Committee Meeting (COST Action 22144)</b>	

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**23-24**  
June 2025

**23 - 27 JUNE 2025**
Republic  
of PolandCo-funded by the  
European Union

### 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 (Coordinator of the Workshop), 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.

PARTICIPATION ON SITE ONLY

Conference Fee

350 zł Researchers

200 zł Doctoral Students / Students

SUSTAIN COST Action 22144 Members

No Registration Fee

Please contact: [conferenceobsidian@gmail.com](mailto:conferenceobsidian@gmail.com) if you have any questions!

Yours Sincerely

 On behalf of the Conference Organising Committee,  
Katarzyna Hryniewicz