

Report on the 1st ESSC - EURECYS International Joint Congress

Sustainable Management of Cultural Landscapes in the context of the European Green Deal

Santo Stefano di Camastra (Italy); 10-14 November 2021

The 1st ESSC and EURECYS International Joint Congress was celebrated at Santo Stefano di Camastra, a village close to Palermo, Sicily (Italy), from November 10 to 14, 2021. The congress took place at the Cinema Glauco and the Museum of Ceramics, kindly made available by Santo Stefano di Camastra Municipality, and was attended by over 100 scientists (Fig.) from 19 EU and non-EU Countries. The principal theme of the Congress was to give a comprehensive overview on the importance of preserving our landscapes and sustainably managing our lands in the context of the European Green Deal. This was successfully achieved through 54 oral presentations and four poster sessions showcasing an impressive body of international research.

The Congress was endorsed by the Università degli Studi di Palermo, Parco dei Nebrodi, Gaia Education, Comune di Santo Stefano di Camastra, and Göteborg University.

The opening ceremony commenced with welcome speeches by Carmelo Dazzi (ESSC President) and by Tamas Komives (ECOCYCLES President) (Fig 1 and 2). The plenary keynote speech was given by Professor Emeritus at the Weizmann Institute of Science in Rehovot (Israel), Jonathan Gressel (Fig. 3), about the unexpected potentiality of microalgae cultivation in the circular economic and ecological systems to offset and mitigate against ongoing food security and climate change challenges. The first day concluded with the welcome cocktail served in the Museum of Ceramics facilitated by the professional work of Istituto Alberghiero Angelo Florena's students, who kindly served traditional meals and drinks for the entire duration of the Congress.





Fig. 1 - Prof. Carmelo Dazzi

Fig. 2 - Prof. Tamas Komives

Fig. 3- Prof. Jonathan Gressel

Scientific Program

The Congress was organized in four scientific sessions, characterized by a great variety of research frameworks. The first one, titled "Linking Europe's Green Deal to Soil care", was introduced by the scientific lecture of Professor Edoardo A.C. Costantini, from the CNR-IBE – Biology, Agriculture and Food Sciences Department, Sesto Fiorentino (Italy) (Fig. 4). His keynote lecture showed the linkages between the European Green Deal and the soil care document, underling that soil health is the starting point for the transformation of the entire food chain. He also expressed his personal concern about the goals since they appear to be very ambitious.

The second session, titled "Agriculture and natural resource management", was opened by Professor Zoltán Péter Alföldi (Fig. 5) from the Hungarian University for Agriculture & Life Sciences, Georgikon Campus (Hungary). Professor underlined the importance of citizen science against global problems, reporting a significant practice example of how qualified and reliable amateur (citizen) scientists can expand and increase scientific knowledge.

May East from the UN House Scotland Director of Cities program (United Kingdom) introduced the third session "Principles and issues in sustainable regional development". The keynote speech explored the scope for policy-makers, urban planners, and practitioners to learn from the eco-communities living laboratories, striving to demonstrate low-carbon, place-based values, and practices for 20-minutes human settlements to thrive.

The fourth session was opened by Professor Bosse Lagerquist (Fig. 6) from the Department of Conservation at the University of Göteborg (Sweden), titled "Cultural Landscapes and Heritage

Science". The lecture presented the concept of integrated conservation to sustainably manage landscapes and the relation between top-down and bottom-up processes.







Fig. 4 - Prof. Edoardo Costantini

Fig. 5 - Prof. Zoltán Péter Alföldi

Fig. 6- Prof. Bosse Lagerqvist

Posters were exhibited at Cinema Glauco throughout the duration of the event, organized in sessions as for the oral presentations.

On the final day, after scientific sessions concluded, Professor Sándor Némethy, Secretary-General of EURECYS, introduced the participants to the ESSC – EURECYS International Joint Congress 2022 to be hosted in the Balaton region (Hungary).

Professor Giuseppe Lo Papa, in charge for the organization, and Professor Carmelo Dazzi, the ESSC President, expressed their gratitude to the collaborators, workers, and participants who contributed to the successful congress. The last moment was dedicated to awarding three young researchers who obtained an ESSC grants of €500 each. The awardees were (1) Shachi Pandey (Fig. 7), from the Forest Research Institute (Dehradun, India), for her study on "Assessing alterations in soil erosion vulnerability status based on water quality using Multinomial Logistic Regression", in collaboration with Raman Nautiyal, Parmanand Kumar, Vijender Pal Panwar; (2) Mauro de Feudis (Fig. 8), from the Alma Mater Studiorum − University of Bologna (Bologna, Italy), for his research on the "Relationships between canal water, bed sediments, and surrounding soils: A preliminary study for the artificial canals network of Bologna floodplain (Italy)", with the participation of Gloria Falsone, Chiara Poesio, Andrea Morsolin, Michele Solmi, and Livia Vittoria Antisari; and (3) Dominique Serrani (Fig. 9), from Polytechnic University of Marche (Ancona, Italy), for her investigation on "Soil omics approach highlights on slash and burn sustainability", written with Ilario Ferrocino, Cristiana Garofalo, Andrea Osimani, Maria Rita Corvaglia, Vesna

Milanovíc, Lucia Aquilanti, Stefania Cocco, Valeria Cardelli, Rogério Borguete Alves Rafael, Elena Franciosi, Kieran Tuohy, Francesca Clementi, and Giuseppe Corti.







Fig. 7 - Shachi Pandey Fig. 7 - Mauro de Feudis Fig. 7 - Dominique Serrani awarded by Edoardo awarded by Giuseppe Lo Papa. awarded by Carmelo Dazzi.

Costantini.

Social Program and Field & Cultural Excursions

On Wednesday 10th a cocktail was served in the Museum of Ceramics in Santo Stefano di Camastra to welcome the attendants.

On Thursday 11th, the day ended with a convivial social dinner at the Hotel Za' Maria, where traditional Sicilian food was served. Delegates were entertained by the folk music and dance group *Amastra*.

The Scientific and Cultural Excursion was on Saturday, 13th and included visits to three unique sites: the Cupitur Farm, the San Teodoro Cave, and Nebrodi Natural Park. The first stop was at the Cupitur Farm, located in Caronia (Messina), which is one of the most important examples of subtropical fruit production in Italy, and definitely one of the pioneers in this field (Fig. 10). The farm has a continuous and profitable collaboration with the Department of Agricultural, Food, and Forest Sciences (UNIPA) to improve the cultivation techniques. The second stop was at the San Teodoro Cave, close to Acquedolci (Messina) (Fig. 11). The Cave dates back 10 million years ago and, represents a very important paleontological and paleoanthropological site in Sicily due to the findings of ancient animals and human bones. The final stop was in the Nebrodi Park (Fig. 12), where delegates had the opportunity to observe the rich variability and beauty of the landscape before reaching the *Passo del Re* restaurant, where an authentic "country lunch" was served.

The excursion concluded approximately at 5 pm and the group returned to Santo Stefano di Camastra to say goodbye until next year.



Fig 10 – The first stop of the excursion: the Cupitur Farm.



Fig 11 – The second stop of the excursion: the San Teodoro Cave.



Fig. 12– The third stop of the excursion: the Nebrodi Park.

Sponsors

The Congress was also sponsored by the International Union of Soil Sciences (IUSS), the International Soil Conservation Organization (ISCO), the World Association of Soil and Water Conservation (WASWAC), the Global Soil Partnership (GSP), the Erasmus+ program, the Associazione Italiana Società Scientifiche Agrarie (AISSA), the World Agricultural Heritage Foundation (WAHF), the Italian Society of Soil Science (SISS), the Mediterranean Agronomic Institute of Bari (CIHEAM), the Italian Society of Pedology (SIPe), the Italian Society of Agricultural Chemistry (SICA), the Italian Society of Silviculture and Forest Ecology (SISEF), the European Confederation of Soil Science Societies (ECSSS), the Associazione Italiana di Geografia Fisica e Geomorfologia (AIGeo), the Italian Society of Ecology and Landscape (SIEP), the Consulta Ordini Ingegneri Sicilia, the Ordine Regionale Geologi di Sicilia, the Associazione Italiana per l'Ingegneria Naturalistica (AIPIN), the Federazione ordine dei Dottori Agronomi e dei Dottori Forestali di Sicilia, the Ministero della Transizione Ecologica, and the European Joint Programme EJP-SOIL.

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