

BOOK OF ABSTRACTS



Sassari, April 15-16-17, 2015

PaulisProject



Università
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The International Symposium on Mediterranean Temporary Ponds will offer an opportunity to researchers with different cultural background, students, practitioners, policy makers, and other stakeholders for exchanging experiences and information on the ecology, the biodiversity and the management of this type of habitat, with the aim of promoting its effective conservation and improving public awareness.

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Dani Boix – University of Girona (Spain)
Maria Carmela Caria – University of Sassari (Italy)
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Aline Waterkeyn – KU Leuven (Belgium)

PROGRAM

April 15th 2015

8.30-9.30 **Registration**

9.30-9.45 **Opening session**

9.45-10.00 **Presentation of the project *Paulis***

Simonetta Bagella, Dani Boix, Maria Carmela Caria, Jordi Compte, Stéphanie Gascón, Giorgia Filippino, Stefania Pisanu, Elena Pittao, Jordi Sala, Annalena Cogoni

SESSION 1

Moderator: *Pascale Nicolet*

10.00-10.45 **The plants of Mediterranean temporary pools: do we know enough for their conservation?**

Patrick Grillas, Laila Rhazi, Simonetta Bagella

10.45-11.15 **Coffee break**

11.15-11.35 **Hydrological and vegetation changes over 25-year period in the Doñana Temporary Ponds (SW Spain)**

Laura Serrano, María Zunzunegui, Mari Paz Esquivias-Segura

11.35-11.55 **Seed germination, plant traits and dynamic processes**

Angelino Carta

11.55-12.15 **Phylogenetic clustering as a tool for long-term monitoring of plant communities in rockpools**

Sandro Lanfranco, Claire Grima, Lara Galea, Kelly Briffa, Sheryl Sammut

12.15-12.35 **Occurrence and distribution of ephemeral wetland communities in South America: completing vegetation data with herbarium records**

Miguel Alvarez, Ulrich Deil

POSTER INTRODUCTION

12.35-13.15 *Stéphanie Gascón, Jordi Sala*

SESSION 2

Moderator: *Michela Marignani*

15.00-15.45 **Bryophytes as a model organisms: methodological challenges for biodiversity assessment in a changing world**

Rosalina Gabriel

15.45-16.05 **Temporary wetlands in southern Australia: predicting responses to climate change**

Michelle T. Casanova

16.05-16.25 **Bryoflora of temporary ponds in the Mediterranean Basin: hints for management and conservation**

Annalena Cogoni, Giorgia Filippino, Monica Zoccheddu, Michela Marignani

16.25-16.35 **Chara baltica Bruzelius (Characeae) recorded in Sardinia**

Klaus van de Weyer

16.35-17.00 **Coffee break**

17.00-18.30 **PHOTO CONTEST: PHOTO PROJECTION AND PRIZE-GIVING**

in collaboration with Società Botanica Italiana Sezione Sarda, Sardegna Natura and P.Ass.I.Flora Ambiente

April 16th 2015

SESSION 3

Moderator: *Beat Oertli*

9.00-9.45 **Ecology and conservation of the fauna of Mediterranean temporary ponds**

Aline Waterkeyn, Maarten Van den Broeck, Laila Rhazi, Patrick Grillas, Luc Brendonck

- 9.45-10.05 **Contrasting intra-annual patterns of six biotic groups with different dispersal mode and ability in Mediterranean temporary ponds**
Dani Boix, Maria Carmela Caria, Stéphanie Gascón, Maria Antonietta Mariani, Jordi Sala, Albert Ruhí, Jordi Compte, Simonetta Bagella
- 10.05-10.25 **A comparison of Cladocera and Copepoda as indicators of hydroperiod length in Mediterranean temporary ponds**
Marco Seminara, Daria Vagaggini, Fabio Stoch
- 10.25-10.45 **Does connectivity mitigate the effects of drying on communities? Insights from a cross-system analysis**
Véronique Rosset, Albert Ruhí, Michael Bogan, Thibault Datry
- 10.45-11.05 **Successional changes in zooplankton of restored ponds with different age: a Russian doll perspective**
Xavier Armengol, Carla Olmo, Raquel Ortells
- 11.05-11.35 **Coffee break**
- 11.35-11.55 **The role of spatial and environmental factors as determinants of large branchiopod distribution in Tunisian temporary ponds**
Fabio Stoch, Michael Korn, Souad Turki, Luigi Naselli Flores, Federico Marrone
- 11.55-12.15 **Patterns of crustacean assemblages and vascular plants in ponds of different hydroperiod: a case study from the Alta Murgia National Park, Apulia (South-eastern Italy)**
Giuseppe Alfonso, Leonardo Beccarisi, Valentina Pieri, Annagrazia Frassanito, Genuario Belmonte
- 12.15-12.35 **Seasonal succession of crustaceans in Mediterranean Temporary Ponds: community and population traits**
María Sahuquillo, María Rosa Miracle

SESSION 4

Moderator: *Susana Romo*

- 14.30-14.50 **Million Ponds Project: successes and lessons learned from monitoring new ponds**
Pascale Nicolet, Penny Williams, Jeremy Biggs
- 14.50-15.10 **The role of the Centers for environmental education and sustainability in the protection of the Mediterranean temporary ponds**
Maria Rita Viridis, Stefania Pisanu, Paola Bazzoni, Alessandra Manca

International Symposium of Mediterranean Temporary Ponds

15.10-15.30 **Quick and easy conservation status assessment: is it possible in Mediterranean temporary ponds?**

Carla Pinto-Cruz, Ana Lumbreras, J. Tiago Marques, Anabela Belo

15.30-15.50 **Public perception about ponds and their biodiversity in Portugal. Do practical environmental education activities help change public awareness?**

Eunice Sousa, Ana Maria Rodrigues, José Teixeira

15.50-16.20 *Coffee break*

16.20-18.15 **POSTER SESSION**

18.15-18.45 **CONCLUSIONS AND FINAL REMARKS**

Moderator: *Dani Boix*

20.00 **SYMPOSIUM DINNER**

April 17th 2015

7.30-21.00 **FIELD TRIP**

Conference Venue

University of Sassari - Polo Bionaturalistico di Piandanna. Via Piandanna 4, Sassari -Italy

ECOLOGY OF MEDITERRANEAN TEMPORARY POND PLANT COMMUNITIES ON VOLCANIC SUBSTRATES OF SICILY

Minissale Pietro, Sciandrello Saverio

Department of Biological, Geological and Environmental Sciences, University of Catania, Via A. Longo 19, 95125 Catania, Italy. p.minissale@unict.it

Mediterranean temporary ponds represent a remarkable habitat for plant and fauna diversity and are classified among the most biologically and biogeographically interesting ecosystems in the Mediterranean region (Deil 2005; Zacharias et al. 2007; Bagella & Caria 2012; Minissale & Sciandrello 2014). Among them, rock pools are particularly relevant because they are small seasonal wetlands, annually subjected to extreme and unstable ecological conditions (Pinto-Cruz et al. 2009; Rhazi et al. 2009; Ghosn et al. 2010). Although several phytosociological studies have been carried out on this habitat in Sicily, (Brullo & Di Martino 1974; Brullo & Marcenò 1974; Brullo et al. 1976; Brullo et al. 1977; Raimondo 1980; Raimondo et al. 1981; Minissale & Spampinato 1987; Brullo et al. 1998; Brullo & Minissale 1998; Brullo & Sciandrello 2006; Pasta et al. 2008; Sciandrello 2007, 2009; Minissale et al. 2011; Sciandrello et al. 2013), few data are available on their ecology and spatial organization (Minissale & Sciandrello 2014).

Temporary ponds on volcanic bedrock are mainly localized in the Etna region, in the south-eastern sector (Hyblaean volcanism) and are also present in the island of Pantelleria.

With this contribution we want to improve the knowledge about the ecological conditions affecting and selecting the floristic composition of communities with reference to those that grow on soils derived from volcanic rocks.

Therefore the main objectives of this research were: (1) to analyse the floristic composition of temporary volcanic rock pool plant communities; (2) to evaluate the effects of ecological features on the species richness and diversity; (3) to define spatial patterns of plant communities.

Syntaxonomical scheme

ISÖETO-NANOJUNCETEA Br.-Bl. & R.Tx. ex Westhoff et al. 1946

ISÖETALIA Br.-Bl. 1936

ISÖETION Br.-Bl. 1936

Isöeto-Ranunculetum parviflori Brullo, Di Martino & Marcenò 1977 (Pantelleria, Brullo et al. 1977)

Isoetum duriei community (Cozzofico, Carlentini, unpublished data.)

PRESLION CERVINAE Br.-Bl. ex Moor 1937

Ranunculo-Antinorietum insularis Brullo, Grillo & Terrasi 1976 subass. *isoetosum durieui* (M. Lauro, Brullo et al. 1976)

Ranunculo lateriflori-Callitrichetum brutiae Brullo & Minissale 1998 (M. Lauro, Brullo et al. 1976)

Callitricho-Crassuletum vaillantii Brullo, Scelsi, Siracusa & Tomaselli 1998 (Bosco Pisano, M. Lauro, Brullo et al. 1998 and unpublished data)

CICENDIO-SOLENOPSIS LAURENTIAE Brullo & Minissale 1998

Archidio-Isoetum velatae Brullo & Minissale 1998 (Cozzo Ogliastris, da Brullo & Minissale 1997)

Anagallido parviflorae-Molinerielletum minutae Brullo, Scelsi, Siracusa & Tomaselli 1998 (Bosco Pisano, Brullo et al. 1998)

NANOCYPERETALIA Klika 1935

VERBENION SUPINAE Slavnic 1951

Coronopo-Sisymbrelletum dentatae Minissale & Spampinato 1986 (La Gurrada, Etna, Minissale & Spampinato 1986 and unpublished data)

Corrigiola litoralis community (Sciare di Santa Venera (Bronte) unpublished data)