



ICYMARE

International Conference for
YOUNG Marine Researchers

BOOK OF ABSTRACTS

ICYMARE 2022 BREMERHAVEN

13–16 SEPTEMBER 2022



ICYMARE
International Conference for
YOUNG Marine Researchers

NW
THE BREMEN SOCIETY FOR
NATURAL SCIENCES from 1864

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Program (15. September 2022)



ICYMARE
International Conference for
YOUNG Marine Researchers

Thursday, 15th September 2022

8:30-9:00 **REGISTRATION & WELCOME COFFEE** *Main Hall*

9:00 - 9:15

OPENING

9:15 - 10:00

KEYNOTE: "Where Art meets Science.."

Main Hall

Caroline Ngorobi from Jukwaa Arts Productions, Kenya

10:00-10:45 **PARALELL SESSION**

Session 1.4		Session 2.3		Session 5.4 (part 1)	
10:00 - 10:45	WEAVING INDIGENOUS KNOWLEDGE INTO YOUNG MARINE RESEARCH hosted by Megan Ranapia & Natalie Prinz <i>S207</i>	10:00 - 10:30	BIOBANKING, BIOPROSPECTING, BIODIVERSITY hosted by Darya Chernikhova <i>S201</i>	10:00 - 10:45	OF WHIRLS AND WAVES: EXPLORING THE IMPACTS OF SMALL-SCALE MOTIONS IN THE OCEAN hosted by Nicolas Dettling & Simon Reifenberg <i>S318</i>
1.4.1	Weaving indigenous knowledge into marine research, case studies from Canada and Aotearoa New Zealand by <i>Megan Ranapia & Natalie Prinz</i>	2.3.1	The benefits of long-term databasing of cetaceans in Skjálfandi Bay, Iceland by <i>Charla Jean Basran</i>	5.4.1	Of whirls and waves: Exploring the impacts of small-scale motions in the ocean by <i>Stephan Juricke</i>
1.4.2	Toitū te Mauri - Designing and studying mauri (life-force) in experimental research by <i>Heni Unwin</i>	2.3.2	Open up the black box of "The Unknowns" creation of an open access platform for marine fungi holding polyphasic described model-organisms by <i>Miriam Phoebe Stenel</i>	5.4.2	Scattering and Refraction of Low-Mode Internal Tides by Interaction with Mesoscale Eddies by <i>Zoi Kourkouraidou</i>
1.4.3	The Hidden Gems for Conservation - Indigenous and Local Knowledge of Fishers in Fiji by <i>Salanieta Kitotelei</i>			5.4.3	Quantifying Spectral Energy Transfers in the Eastern South Atlantic using Satellite Data by <i>Emelie Breunig</i>

10:45 - 11:00 **COOFFE BREAK** *Main Hall*

11:00-12:30 **PARALELL SESSION**

Session 1.7		Session 2.5		Session 5.4 (part 2)	
11:00 - 12:00	MARINE RESOURCES: ECONOMICAL INTEREST AND POLLUTANTS hosted by Marta Moriano Ortiz <i>S207</i>	11:00 - 12:15	MOLECULAR TOOLS IN MARINE BIOLOGY: FROM METHODS TO APPLICATIONS hosted by Paulina Urban, Lara Jansen, Yassine Kasmi & Anna Joelle Greife <i>S201</i>	11:00 - 12:15	OF WHIRLS AND WAVES: EXPLORING THE IMPACTS OF SMALL-SCALE MOTIONS IN THE OCEAN hosted by Nicolas Dettling & Simon Reifenberg <i>S318</i>
1.7.1	Traceability implications for heavy metal risks in commercial seafood by <i>Marta Pilar Moriano Ortiz</i>	2.5.1	Range expansions of scyphozoan jellyfish – the case study of <i>Periphylla periphylla</i> and <i>Cyanea capillata</i> by <i>Niko Steiner</i>	5.4.4	The Influence of Topography on Mesoscale Ocean Mixing by <i>Miriam Sterl</i>
1.7.2	Integrated methodologies for the tracking of illegally traded glass eels by <i>Hugo Campillo Gancedo</i>	2.5.2	Who's there? A comprehensive eDNA metabarcoding survey of gelatinous zooplankton biodiversity in the Fram Strait by <i>Ayla Murray</i>	5.4.6	Modulation of a Dissipation Parameterization with time: Mixing over the Reykjanes Ridge by <i>Peter Farrell</i>
1.7.3	Microplastics in marine macrophytes in the Asturian coast by <i>Amaia Kareaga Bilbao</i>	2.5.3	Utility of environmental DNA in biomonitoring of Tanzanian cryptobenthic fishes: Does the environmental DNA approach perform better than the traditional visual census method? by <i>Cretus Mtonga</i>	5.4.7	Mixing along the Weddell Sea Gravity Current by <i>Ole Pinner</i>
1.7.4	Entrepreneurial ecosystem and innovative entrepreneurship: elements for a conceptual framework for red seaweed farming in Madagascar by <i>Mihary Rabearison</i>	2.5.4	Genetic studies in the coral <i>Parazoanthus axinellae</i> for taxonomic determination by <i>Alfredo Rosales Ruiz</i>	5.4.8	The Impact of Submesoscale Dynamics on the Air Sea Exchange by <i>Moritz Epke</i>
2.5.5		2.5.5	eDNA: Reality or Myth? Qualitative and quantitative approach by <i>Yassine Kasmi</i>		
12:00 - 12:15	Session 1.6 NORTHERN COASTAL COMMUNITIES: TRANSFORMING GOVERNANCE FOR A SUSTAINABLE FUTURE hosted by Maria Wilke <i>S207</i>				
1.6.1	Education for Sustainability Futures Research by <i>Tanya MacDonald</i>				
12:15 - 12:30	Session 1.8 DOES TROPHIC-LEVEL MATTER? AQUACULTURE OF MARINE LOW-TROPHIC ORGANISMS hosted by Beatrice Brix da Costa & Lara Elisabeth Stuthmann <i>S207</i>				
1.8.1	Technical feasibility study for the cultivation of the red algae <i>Halymenia durvillei</i> in the South-West of Madagascar by <i>Rakotonandrasana Santatriniaina Nambintsoa</i>				

Genetic studies in the coral *Parazoanthus axinellae* for taxonomic determination

Alfredo Rosales Ruiz^{1,2}, Rafael Navajas¹, Claudio Jiménez Ruiz¹, Roberto de la Herrán¹, Carmelo Ruiz Rejón¹, Francisca Robles¹

¹Departamento de Genética. Facultad de Ciencias. Universidad de Granada. 18071, Granada, Spain;

²Fundación Museo del Mar de Ceuta. Muelle España. 51001, Ceuta, Spain

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Parazoanthus axinellae is one of the most common corals in the Mediterranean Sea reefs ecosystems, characterizing upper circalittoral and cave-scyaphilic habitats. It can grow incrusting freely over rocky walls or as parasitic species over sponges, mainly the *Axinella* genus. This ecological variety and its high morphological plasticity led to taxonomic uncertainties. Therefore, a genetic characterization is crucial for a correct taxonomic assignment and for the development of conservation strategies. In this study, we have used two amplified DNA regions, cytochrome oxidase I (COI) and internal transcribed spacers from ribosomal genes (ITS) to elucidate the genetic differences between five morphotypes of *P. axinellae* present in the Alboran Sea ("stocky", "slender", "granatensis", "middling", and "cinnabar"). These morphotypes were initially identified on macrostructural and histological characteristics. The genetic analyses carried out in this study have shown that the COI gene is not a suitable marker for variability detection between the morphotypes, due to its low genetic variation, while ITS regions/primer revealed three genetically different clusters. To confirm these results, whole mitochondrial DNA was sequenced for determination of taxonomic status of these morphotypes. Our results suggest that "Stocky" or *P. axinellae* var. *brevitentacularis* and "granatensis" can be separated from *Parazoanthus* and integrated in two new independent taxa due to the differences shown by morphological and molecular analyses. The other three morphotypes ("slender", "middling", and "cinnabar") could be included in *P. axinellae* sensu lato. In conclusion, our findings confirm that a deeper taxonomic re-evaluation for the morphotypes of *P. axinellae* based on morphologic and genetic characters is necessary.