CHEMICAL DIVERSITY OF ZOANTHARIANS FROM THE EASTERN PACIFIC COAST OF ECUADOR.

Paul O. Guillen [1,3], Karla B. Jaramillo [2,3], Jenny Rodriguez [3], Olivier P. Thomas [1]

1. National University of Ireland Galway, School of Chemistry, Marine Biodiscovery, , University Road, Galway, Ireland.
2. National University of Ireland Galway, School of Zoology, Ryan Institute, University Road, H91 TK33 Galway, Ireland
3. Escuela Superior Politécnica del Litoral, ESPOL. Centro Nacional de Investigaciones Marinas, CENAIM. Campus Gustavo Galindo, Km 30,5 Via Perimetral, Guayaquil, Ecuador

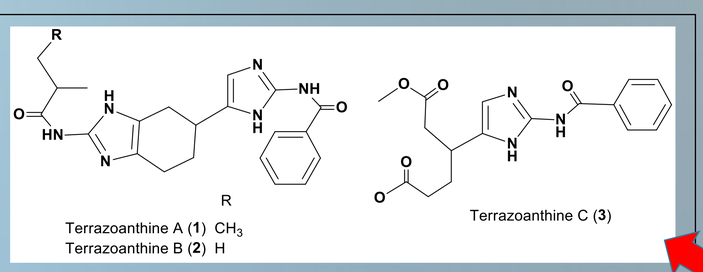
INTRODUCTION

The marine environment is a vast source of a biological and chemical diversity which has risen the interest of the scientific community in the search for potential therapeutics. Chemical entities with unique structure and potent biological activities have been described from several marine invertebrates particularly sponges. Considering that most of the chemical studies have been reported from high spots of marine biodiversity like the Pacific Ocean or the Mediterranean, the Tropical Eastern Pacific has been largely underexplored. For example, Ecuador which is one of the countries with the biggest biodiversity in the world, only few studies regarding the marine environment have been reported. Zoantharians are one of the most representative species in this area and no chemical studies from these species have been described so far. We therefore decided to undertake the first chemical inspections of some representative species belonging to the order Zoantharia inhabiting the marine protected area El Pelado.

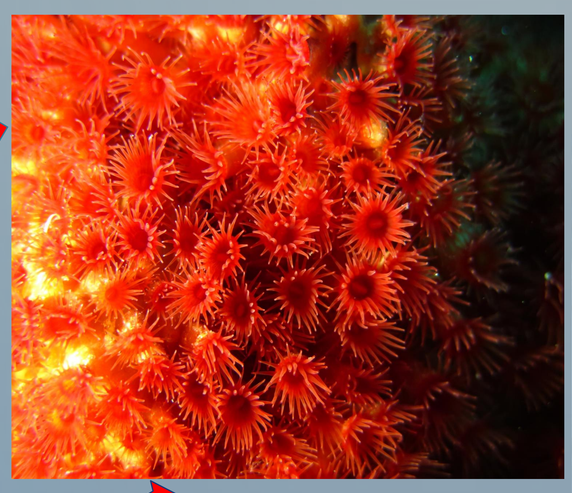
OBJECTIVES

- Describe the chemical diversity of Zoantharians inhabiting in the Marine Protected Area “El Pelado” - Ecuador.
- Identify potential bioactive compounds to be used in animal and human health.
- Present the first results of the chemical diversity of zoantharians from the Eastern Pacific Coast.

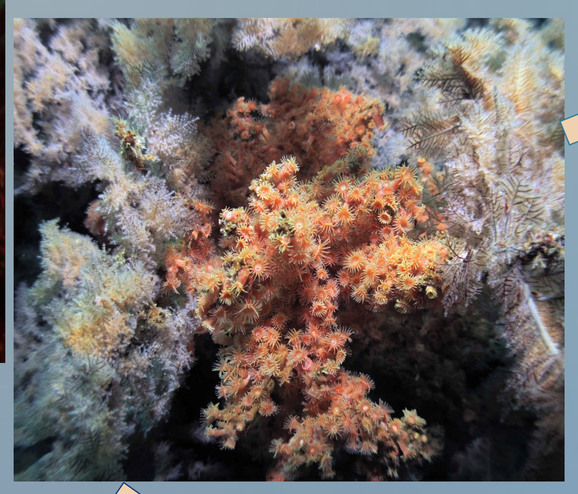
RESULTS

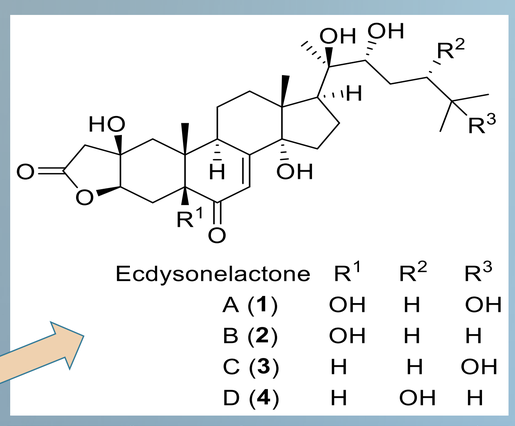


Terrazoanthus patagonichus

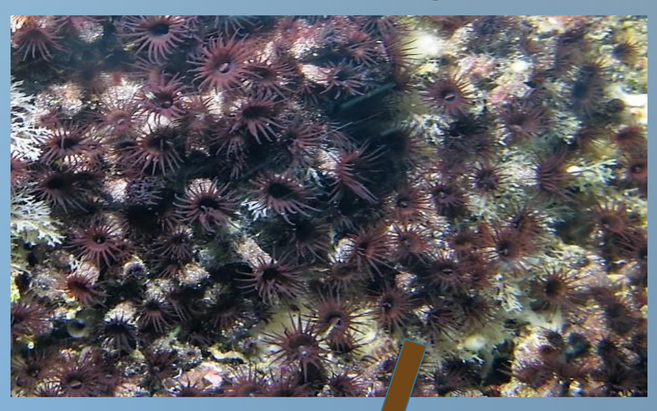


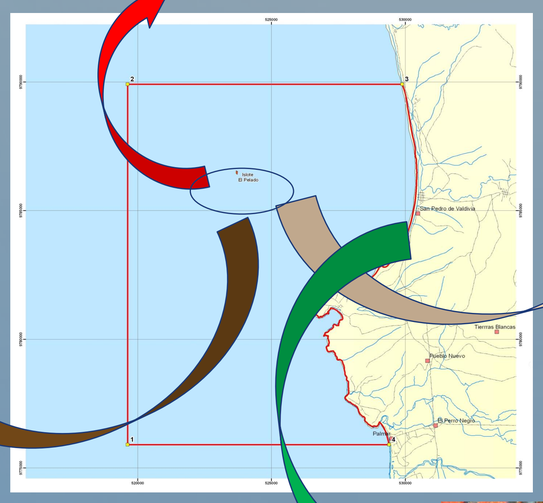
Antipathozoanthus hickmani



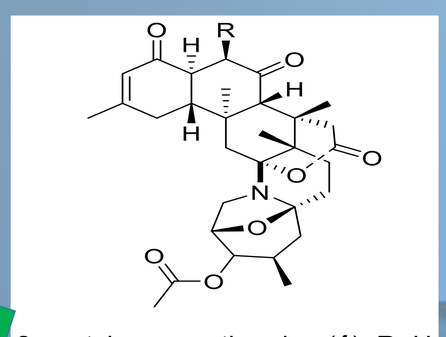


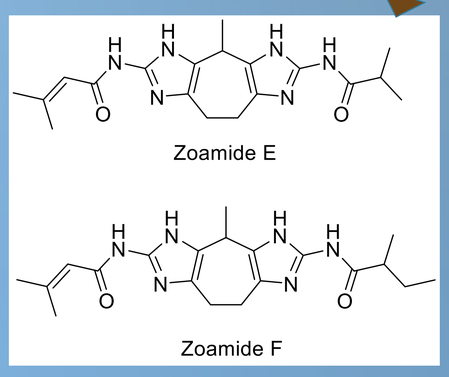
Terrazoanthus sp.

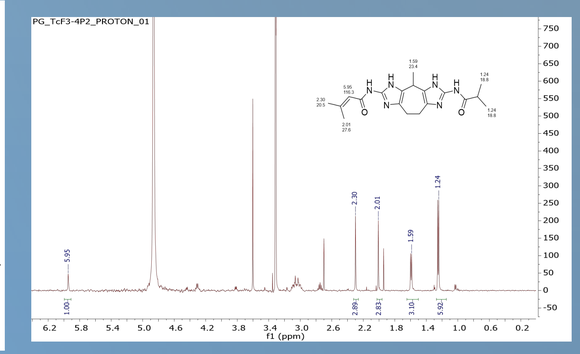


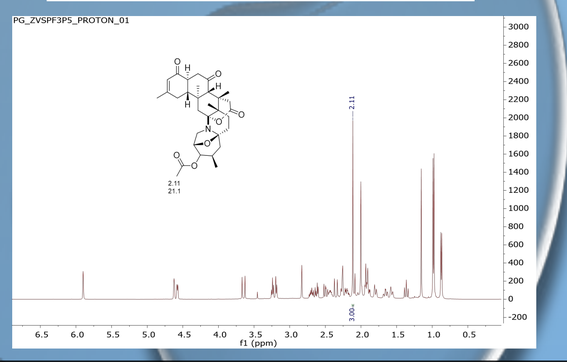


Zoanthus pulchellus









CONCLUSION

- This is the first report of the chemical diversity of zoantharians from the Tropical Eastern Pacific Coast.
- One novel familly of alkaloids 2-aminoimidazole from *T. patagonichus.*
- Some of these compounds are species specific like zoanthamines and terrazoanthines that could be used as chemotaxonomic markers.
- Zoantharians are a very promising source of a great chemical diversity and bioactive metabolites like zoanthamines.

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