

ANTIBACTERIAL PROPERTY OF MICROBIAL SYMBIONTS ISOLATED FROM DONKEY'S EAR ABALONE

Haliotis asinina



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INTRODUCTION

❖ Marine invertebrates are sources of bioactive
Fishes and cephalopods – bioluminescent bacteria
(metabolites) (Haygood 1999)



INTRODUCTION

❖ Cnidarians- photosynthetic symbionts (Rowan 1998)



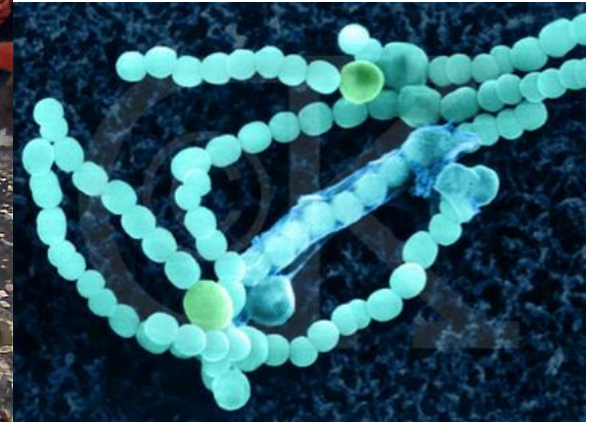
INTRODUCTION

❖ Sponge – bacterial symbionts (Beer and Ilan)



INTRODUCTION

- ❖ Vestimentiferans – chemoautotrophic symbiotic bacteria (Cavanaugh 1994)



OBJECTIVES

- ❖ Isolate microbial symbionts from Donkey's Ear Abalone *Haliotis asinina*
- ❖ Determine the antibacterial property of isolated microbial symbionts

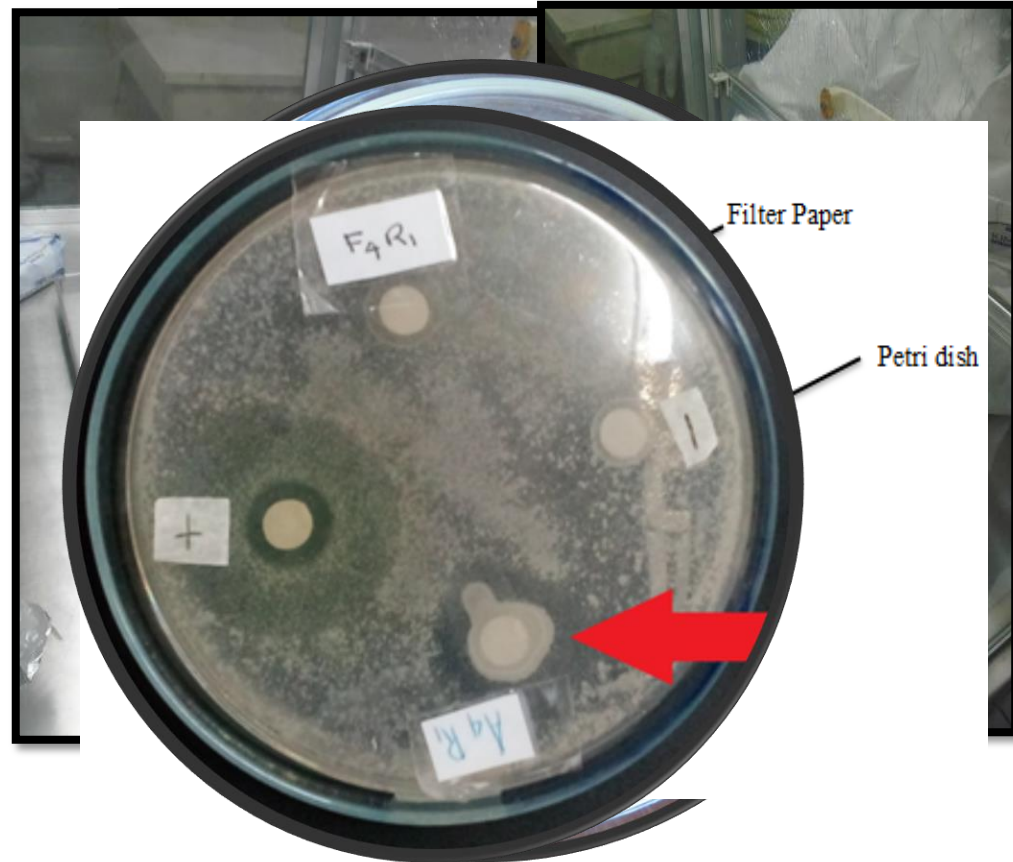
METHODOLOGY

SOURCE OF SAMPLE

**PREPARATION OF
HOMOGENATES**

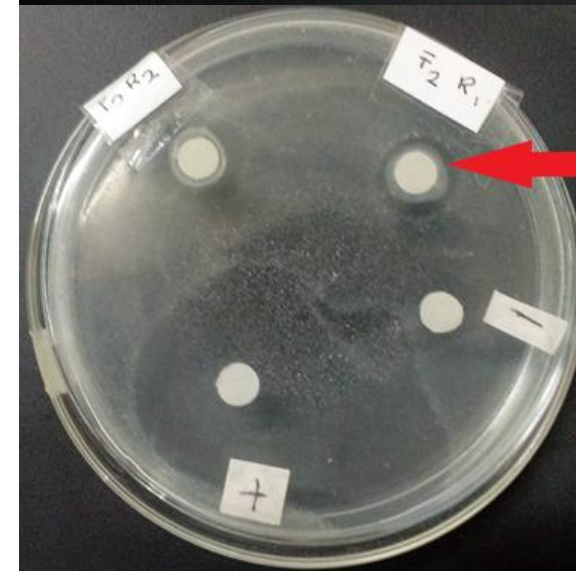
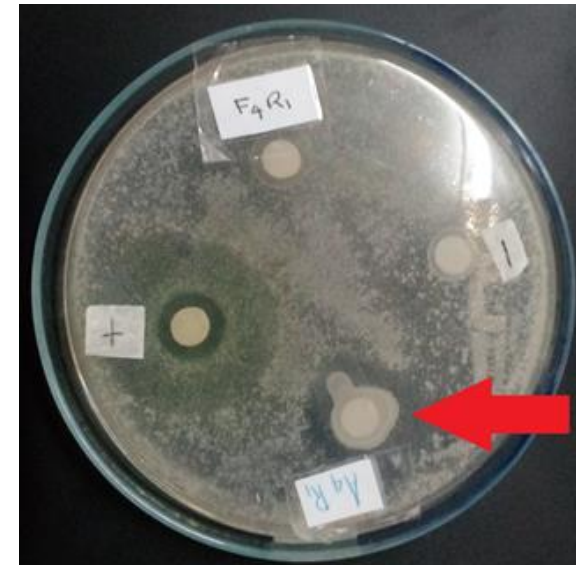
**ISOLATION OF MICROBIAL
SYMBIONT**

**ANTIMICROBIAL TESTING OF
MICROBIAL SYMBIONTS**

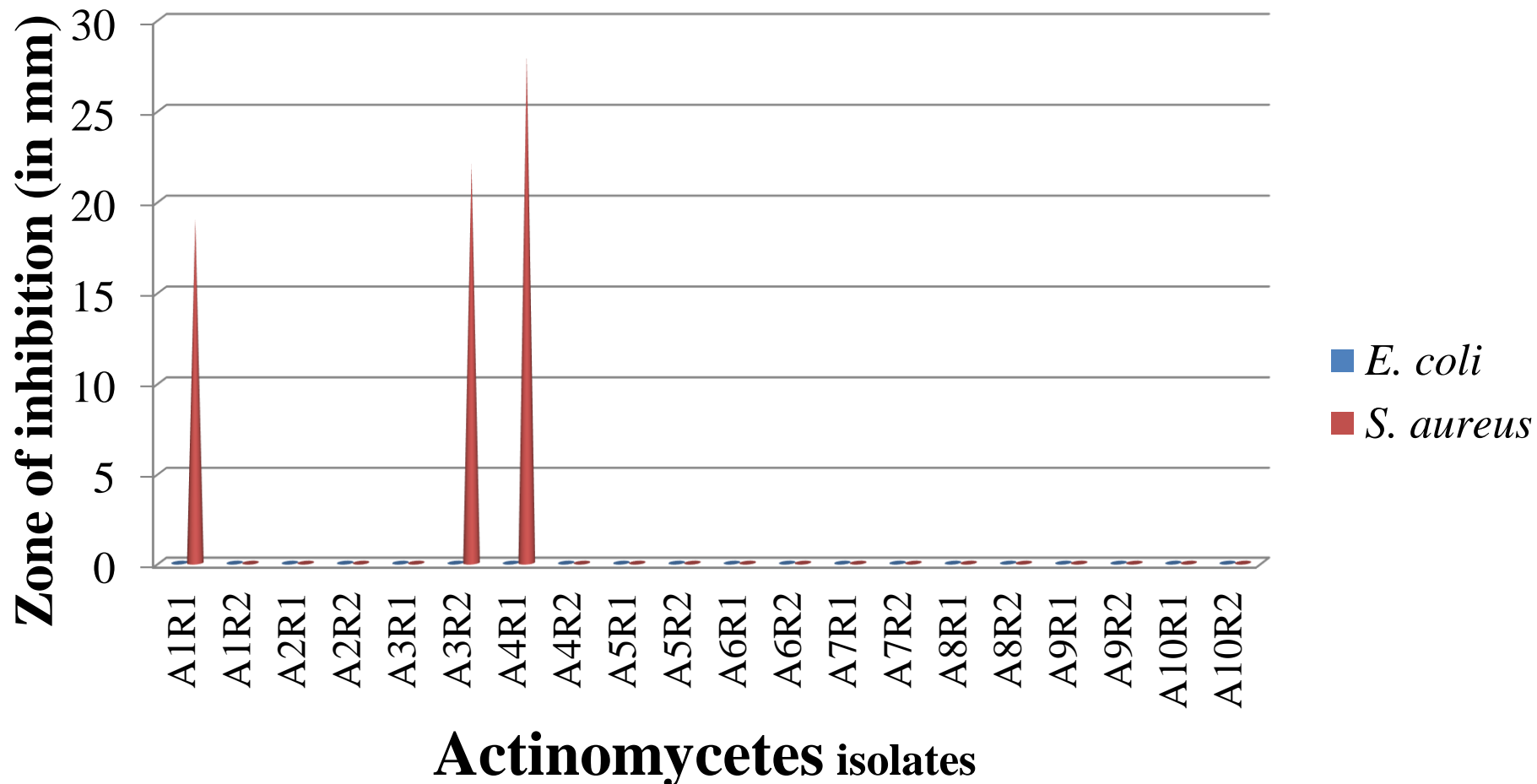


RESULTS AND DISCUSSION

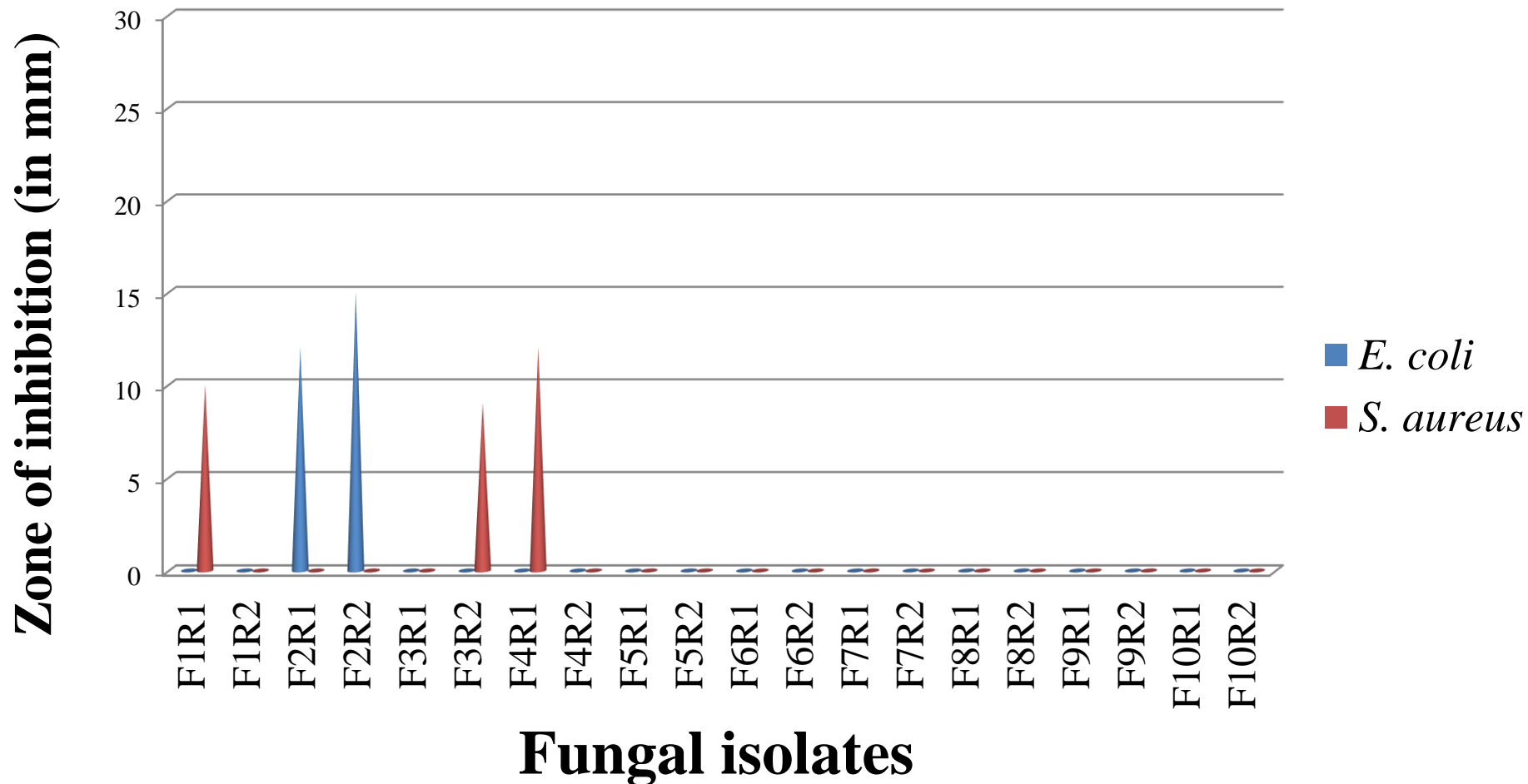
- ❖ Microbial symbionts were successfully isolated(Fungi and Actinomycetes).
- ❖ There was a total of **20 isolates**, 10 for each of the Actinomycetes and Fungi
- ❖ There were **3 actinomycetes** isolates and **5 fungal** isolates which showed antibacterial property.



Antibacterial property of Actinomycetes isolates



Antibacterial property of Fungal isolates



CONCLUSION

- ❖ It is proven that there are actinomycetes and fungal symbionts from tropical abalone.
- ❖ Among these actinomycetes and fungal symbionts, there exist species which are antibiotic producing.

RECOMMENDATIONS

- ❖ Isolation and identification of bioactive compounds.
- ❖ Similar studies using other marine organism like sponge, cnidarians and fishes.
- ❖ Similar studies using other species of Abalone that is locally available in Palawan.

Acknowledgements



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