

Isolation, Structure Elucidation and Biological Activity of Secondary Metabolites from Marine Sponge: *Hyrtios proteus*

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The marine sponge *Hyrtios proteus* has been associated with diverse kinds of biological active compounds. An example of this is a sesteterepene known as “Hyrtiosal” that has been related with activity in the nervous system. A similar compound, namely “Hyrtimomine A” has showed cytotoxicity against human epidermoid carcinoma cells and leukemia cells. Hence, our research aims to isolate, characterize and evaluate the biological activity of secondary metabolites from the marine sponge *Hyrtios proteus*. Recently, we are working on isolating and purifying a number of different compounds from the Hexane and Chloroform extracts. Most of these molecules are been identified using Nuclear Magnetic Resonance techniques, Infrared, Column Chromatography and Thin Layer Chromatography characterization. Interestingly, this sponge has not been previously associated with any other biological activity. Therefore, we are directing our investigation towards testing these compounds as potential treatment for malaria and tuberculosis. Finally, we are still looking to discover drug treatments through other secondary metabolites from this Caribbean sponge.