

Immune response of *Acropora cervicornis* to solar radiation and sea surface temperatures

Abstract

Climate change and alteration in the environmental conditions are external stressor for coral reefs. Factors such as solar radiation and sea surface temperature could lead to a harmful state for these organisms. Immune response of corals to environmental stressors involves the activity of phenoloxidase (PO) and the production of different photoprotective molecules such as pigments and fluorescent proteins (FP). In this work, the Caribbean coral *Acropora cervicornis* is evaluated as a model to predict how environmental stressors affect the response of the coral's immune system. The immune responses of corals are measured through the monitoring of FPs levels and phenoloxidase activity.