

Stress responses of reef-building corals

*Tomihiko Higuchi¹

1. Atmosphere and Ocean Research Institute, The University of Tokyo

Over the past several decades, coral reef ecosystems have experienced various stresses and extensive degradation due to increased anthropogenic activity. Reef-building corals respond to stress in various ways (e.g. bleaching, etc.). Corals exhibit defense mechanisms such as mycosporine-like amino acids against stresses, although many of these functions have not yet been clarified. Understanding the defense mechanisms in corals could provide important information for finding solutions to stress-related responses such as coral bleaching. In this presentation, I describe coral bleaching, oxidative stress, antioxidant activities as responses and defense mechanisms against environmental stressors including high temperature, low temperature, eutrophication, and ultraviolet radiation.

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